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Vol. XLII. No. 1

JANUARY 6th, 1941

Price 6d.

Special Articles This Month

Apple and Pear Acquisition
Spraying Hints
New Zealand Fruit Industry
Activities of Vic. Department
of Agriculture
Murrumbidgee Irrigation Areas
of N.S.W.
Items of Interest from
South Australia
Market Notes and Prices

Observations on Fruit Growing in
the United States of America
Tasmanian News and Notes
The Market Grower
Dried, Canned and Citrus Fruits
News of the Month
Disposing of Vine Cuttings
Discharge of Salted Drainage
Water into Murray River

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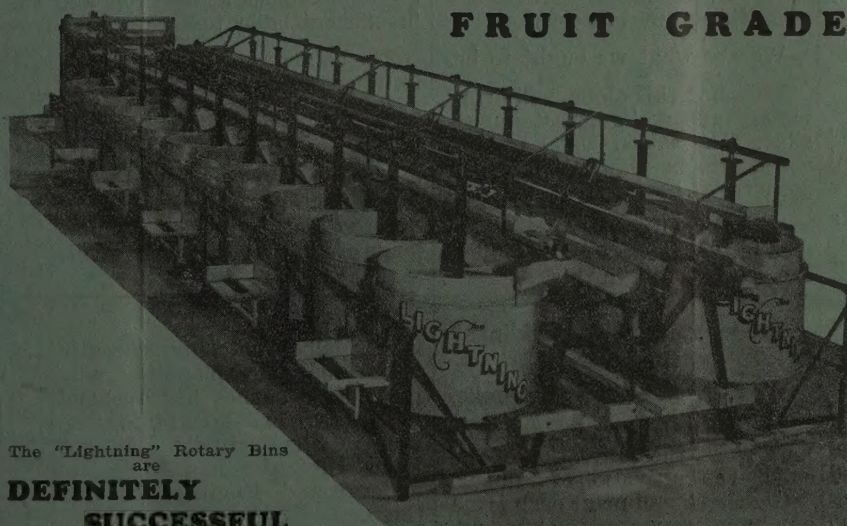
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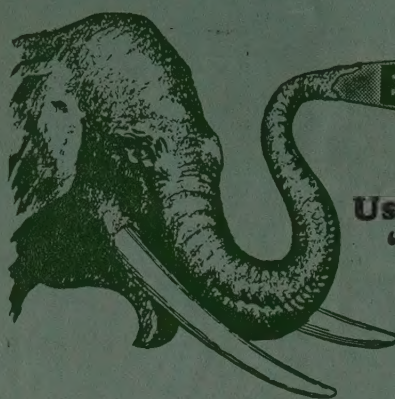
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Extract from "BETTER FRUIT" by Dr. R. L. Webster, Entomologist, State College of Washington, Pullman: **CODLING MOTH COVER SPRAYS**—"Ever since the imposition of an arsenic tolerance in 1926, and even before that time, investigators have been testing other materials which may be used in place of lead arsenate. Following all these intensive and extensive investigations lead arsenate appears to have certain inherent qualities which place this material foremost as an insecticide for codling moth control."

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PITHY BITS

By "Gadabout"

Gadabout sends to all readers his greetings and best wishes for Peace and Prosperity for 1941.

Is It a Vain Wish?

It is possible that 1941 will bring international peace, but only if in 1941 the British Empire wins and the British Empire will win in 1941 only if our united efforts are what they can be.

Our own boys are now fighting on the other side; surely we must now go the limit, and that limit the sky.

The Aussie fighter will fight until, if need be, he dies; but what of us? Bickering and disunity must stop, and the spirit of sacrifice and service spread through all sections, otherwise the world's democracies will enter into slavery and the Dictators will govern.

There can be no prosperity in defeat—there can be prosperity in victory.

National Greatness.

The strength—the character—of the British peoples can only be the multiplication of what each one of us is.

In each one of us is born a latent greatness. It flows in the blood we inherited from our ancestors.

Let that latent greatness through.

During the last war a product of Melbourne's slums—a criminal—young as he was, almost a drunken sot—enlisted. He had dimly caught the vision. He died out in No Man's Land carrying water to his wounded officer who had often disciplined him.

Can we, who are so much better situated, show as we face our duties the spirit that was re-born in him?

Our 1941 Resolutions.

We will cultivate our orchards, plough our fields, harvest our crops, pack our fruit, spray our

pests, not alone from the motive of personal gain, but because our prosperity means national prosperity.

The added character we make in ourselves in fighting through our own problems for this higher motive makes for a greater national character that can never be defeated because it knows no defeat.

When we find a way out,

When we prevent gluts in fruit,

When we have a better selling and marketing organisation,

When we grow better, bigger and cleaner fruit,

When we pack better,

When we make the land grow more,

When we labor better and longer,

When we steady our minds and stiffen our muscles,

We are what we ought to be.

This, and this alone, will bring victory and make defeat impossible. The nation that leads the world will be the nation which deserves it.

Sixty thousand Australians died in the last war and a million are ready to die in this.

Are we going to be weaklings?
Humour.

We will "take it" with a smile.

Let us relieve the tension of hard work, the cultivation of the soil by the cultivation of humour.

Gadabout will print each issue any humorous story or humorous experience that readers may send in.

Gadabout's grandchild prayed as follows:—

Please God bless Uncle Jim,
To us God, he is Uncle Jim,
but to you he is Mr. Ugalde.

Orchard Irrigation**Avoidance of Errors**

IN dealing with some of the mistakes made by orchardists in an address submitted by Mr. P. Ingerson before his local branch of the Agricultural Bureau (states the S.A. Jour. Agric.) he touched upon some methods of irrigation adopted, and quoted the following mistakes:—

(1) Long waterings where the furrow system is used. Results: Seepage from the headlands, salt-laden soil in the centres, floodings at the end of the rows. What could be worse? (2) Short waterings with a fast stream. Result: Insufficient soakage except at the footlands, where once again flooding is the order of things. (3) Setting water overnight on sandy soils and allowing them to run all night without attention. (4) Having too many irrigation systems working on the block at one time and insufficient labor to care for it.

The points to be observed most in irrigation are: (a) Have your system as perfect as possible, with proper outlets, and enough of them, and which are easily controlled. (b) See that your waterings are neither too short nor too long. (c) Get a knowledge of the time the various soils

in your block take to water sufficiently, by cross-trenching at the centre and at the bottom end of the rows, and having done so, make a note of it as well as committing it to memory. (d) Remember that the time the water is running in the furrows is the recognised governing factor as to the quantity of water used in an irrigation. (e) It is not necessary to irrigate to a depth beyond the first two feet of the soil.

WESTERN AUSTRALIA.**Stone Fruits Medium.**

That stone fruit crops in W.A. are not generally so full grown as usual is stated in a report issued early in December by the Northern Districts Council of the W.A. Fruitgrowers' Association. There was a shortage of water due to a dry Winter. Plums, however, have cropped heavily.

Apricots were heavy around Harvey, Mt. Barker, Bridgetown and Roleystone. Bedforddale medium. Early Peaches heavy at Bridgetown, Kelmscott, Roleystone, Gosnells, and Maddington. Late Peaches heavy at Balingup. Other centres have medium to good prospects.

Plums are heavy at Harvey, Dwellingup, Donnybrook, Balingup, Bedforddale, Roleystone, and Parkerville. Medium at Bridgetown, Mt. Barker, Armadale, and Kelmscott.

Mt. Barker has a heavy crop of early Nectarines; medium to heavy at Kalmscott and Roleystone; fair to good at Bedforddale.

Balingup, Mt. Barker and Parkerville have heavy crops of late Nectarines; medium to heavy at Kelmscott and Roleystone; fair to good at Dwellingup; Bridgetown, Bedforddale and Harvey medium; Donnybrook, light to medium.

A Melbourne lady recently asked for an explanation why the Potato bushes her husband had grown had no Potatoes on them. She actually did not know that she had to be an underground Engineer to find them.

A city man wants to know why, when orchardists can sometimes sell Tomatoes at 2/- per case, Oranges, Plums, Peaches, and Apricots down to 1/6 per case, he can't always do it? instead of bleeding the public when he has the chance. Aren't the city folk funny?

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NEWS OF THE MONTH.

OPPORTUNITY IS TAKEN to extend the season's greetings to all readers, and to express the hope that the New Year will be a successful one. It is evident we shall need to devote our full energies to national tasks, which include production and distribution. The fruit industry will not fail to faithfully fill war demands, either in man power or duties on the home front. The gravity of the present situation has been emphasised by the leaders of the Empire and of this nation. We need clarity of vision to discern underlying principles and an inflexible will. While a measure of stability is the lot of the growers of dried and canning fruits, also of citrus growers, the Apple and Pear industry, with its lack of facilities for export, faces an acute problem. The Federal Government, after exhaustive enquiry, has provided an Acquisition Plan, to tide the industry over a difficult period, in order to safeguard the assets represented by the orchards. The goodwill of members of the industry and the general public will be needed to achieve success.

Let us step out into 1941 with the clear determination to vigorously fulfil whatever tasks lie ahead in this titanic struggle for freedom.

OBITUARY.

We regret to report the death of Cr. E. M. Little, who passed away on December 26 after a long and painful illness. Cr. Little has been a Councillor on the Rodney Shire Council for nearly 30 years, and during that time has been President on several occasions.

He was also a director of the Ardmona Fruit Products Co-operation Ltd., and one of the leading citizens of Mooroopna. He leaves a widow and grown-up family to mourn his loss, and we extend to them our heartfelt sympathy and condolence.

Mr. P. A. Pyke, a leading fruitgrower at Ardmona, Vic., passed away on November 18 at the Mooroopna Hospital after a

serious operation. He was also a director of the Ardmona Cannery, where he rendered valuable service, and took a great interest in sport. He leaves a widow and grown-up family, to whom deep sympathy is extended.

Capt. W. J. Wade, representative in Australia of the Port of Manchester, died in Sydney at the end of December. He will be remembered for the vigor with which he attended to his duties and for his unfailing courtesy. Capt. Wade fulfilled many responsible duties in England before coming to this country. Sincere sympathy is extended to the widow and family.

PERSONAL.

Messrs. H. McNee, A. F. Skinner, G. W. Smith and E. W. Baird have been appointed as Instructors in Agriculture for the Queensland Department of Agriculture.

At the invitation of the N.S.W. Department of Agriculture, Mr. J. M. Ward, Superintendent of Horticulture, Victoria, recently visited Batlow, where an address was given by him on his overseas experiences. The talk was illustrated with both silent and talkie pictures.

Amongst those present were Mr. C. G. Savage, Director of Fruit Culture, N.S.W., and over 200 growers from Batlow and surrounding districts.

Mr. William Young, President of the Northern Victoria Fruit-growers' Association, has resigned from the Victorian Apple and Pear Acquisition Committee owing to pressure of other duties. Mr. N. W. Fairless, of Shepparton, has been appointed to the vacancy.

MAKE YOUR
MONEY FIGHT
WAR SAVINGS
CERTIFICATES

Letter to the Editor

Apple and Pear Acquisition

Further Discussion on Crop Restriction Proposals

The Editor, "Fruit World."
Sir,

I have received many letters and verbal comments, mostly favorable, on the crop restriction scheme which I suggested in your last issue.

Some growers contend that too much fruit would be stripped off, while others say that too much would be put on the market. But let every grower apply such a scheme to his own individual conditions, and one of the two alternatives allowed would give him as much satisfaction as it is reasonable to hope for

while the war lasts. It is obvious that conditions would be brought about which would closely resemble those prevailing before the war when a grower had two alternatives, viz., he could sell for export at a price which would return him about 5/- per case f.o.b., or he could market his fruit in Australia.

Almost without exception the opposition to acquisition has come from growers who have always supplied the Australian markets in the past. They have acquired and developed certain

facilities for marketing their fruit such as cool stores, local selling connections, stands in city markets, etc. They know from long experience what the local trade requires and would continue to supply it if given the opportunity.

The support for acquisition has naturally come from growers who have sold their fruit for export. They have none of the local marketing facilities mentioned above. They may be too remote from the markets to develop these facilities, or the varieties they grow may not be required on the local markets. These are the growers who would strip their trees if compensated.

A grower may have been supplying both overseas and local markets with, say, Dunn's and Delicious respectively. The natural thing for him to do would be to strip his Dunn's and market his Delicious. Thus the local trade would be supplied with the varieties it wants by

the men who understand its requirements, while the 5,000,000 case surplus would have been automatically "nipped in the bud."

Another point raised is that the Government could not pay out money on something which does not exist. It is suggested that they may be induced to consider allowing the fruit to develop and then compensate for its removal. This would be a far more wasteful method. It would require at least another 1/- per case and the removal of 5,000,000 cases would cost £750,000, instead of £500,000.

But if the growers of Australia were unanimous in support of the scheme, and the Government could be shown a saving of £250,000, the scheme would surely be attractive.

It has also been pointed out to me that the Tasmanian timber industry would be seriously affected, but I have been told that there is a possibility of a timber shortage in Australia now that softwood imports have been restricted, so there must be some more useful purpose to which our timber could be put. Possibly the labor shortage will soon be as acute in the one industry as the other.

The scheme I outlined in last month's issue would suit the Government, the taxpayer, the consumer, the retailer, and the grower. I still believe that some such simple, automatic and economical scheme will have to be adopted to replace the complicated and expensive schemes of 1940 and 1941.

However, while the acquisition scheme continues to be the law of the land I contend that we as growers should do our utmost to make it a success.

Yours faithfully,

R. A. W. BAILEY.

Narre Warren North, Vic,
27/12/40.

IMPERIAL ECONOMIC COMMITTEE.

Suspended During the War.

A most useful service to the fruit industry of the British Empire has been suspended for the duration of the war. The Imperial Economic Committee was representative of all fruit-producing Empire countries and reported periodically on production and trade. It also published an annual summary of world production and international trade which was valuable. It was also a means of information upon economic questions submitted by Empire countries.

At the outbreak of war its staff was temporarily transferred to military duties, though the organisation will be kept intact ready to resume its appreciated service when circumstances permit and the return to normal conditions necessitate careful adaptation to post-war problems.

For Perfect Performance

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IN YOUR ENGINE OR BE OF A
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Australian Apple and Pear Marketing Board

A MENDING Regulations to establish the Acquisition and Marketing Scheme for next season's crop of Apples and Pears were gazetted under the National Security Act early in December. The new Regulations constitute an Apple and Pear Marketing Board instead of the Marketing Committee of the Australian Apple and Pear Board which administered last season's scheme.

The new Board consists of a Chairman (Mr. J. B. Mills), a Deputy Chairman (Mr. H. W. Soothill), and six other members, as follows: Messrs. B. Flewell Smith (Queensland), H. V. Smith (N.S.W.), L. S. Taylor (Tasmania), W. Hutchinson (Victoria), M. J. Vickers (S. Aust.), and G. Parke (W. Aust.). The Board is empowered subject to ministerial direction, to do anything necessary to encourage and extend the use of Apples for canning, dehydration and juice production.

Meetings of the Board were held during the week ending December 21, when many matters of detail were attended to.

Committees have been appointed in the several States as follows:—

State Acquisition Committees.

The Assistant Minister for Commerce (Mr. H. L. Anthony) announced the personnel of the State Committees appointed under the National Security (Apple and Pear Acquisition) Regulations.

The members of the Committee in each of the States are as under:—

New South Wales: Messrs. H. V. Smith, Batlow (Chairman); W. J. I. Nancarrow, Nashdale; W. C. Dickinson, Young; L. J. Jenkins, 10 Ultimo-road, Sydney; James Holmes, 20 Quay-street, Sydney; C. G.

Savage, N.S.W. Department of Agriculture.

Victoria: Messrs. W. P. Hutchinson, Somerville (Chairman); G. A. Sheehan, Canterbury-road, Blackburn; N. W. Fairless, Shepparton East; H. M. Wade, Wholesale Fruit Market, Melbourne; Herbert Wilson, Wholesale Fruit Market, Melbourne; J. M. Ward, Victorian Department of Agriculture.

Queensland: Messrs. B. Flewell-Smith, Committee of Direction of Fruit Marketing (Chairman); E. L. Donaldson, Committee of Direction of Fruit Marketing; H. S. Hunter, Director of Marketing, Department of Agriculture, Queensland; Y. F. Jesser, Turbot-street, Markets, Brisbane; A. Martin, Turbot-street, Markets, Brisbane; D. G. T. Gow, Stanthorpe; H. R. Y. McGuigan, Thulimbah.

South Australia: Messrs. M. J. Vickers, Lenswood (Chairman); H. N. Wicks, Balhannah; J. B. Randell, Gumeracha; P. R. B. Searcy, 20 Hyland-terrace, Rosslyn Park, Magill; L. J. Bishop, 281 Rundle-street, Adelaide; G. A. W. Pope, Government Produce Department; A. G. Strickland, S.A. Department of Agriculture.

Western Australia: Messrs. H. W. Soothill (Chairman); George Parke, Donnybrook (Deputy Chairman); H. Q. Robinson, Wooroloo; F. W. Lantzke, Metropolitan Markets, West Perth; B. Mercer, Metropolitan Markets, West Perth; R. M. Carter, 641 Wellington-street, Perth; H. R. Powell, W.A. Department of Agriculture.

Tasmania: Messrs. L. S. Taylor, Exeter (Chairman); T. Burnaby, Cygnet; D. E. Ryan, Franklin; Hon. W. H. F. Calvert, Hobart; Messrs. R. W. Humphreys, Hobart; P. H. Thomas, Tasmanian Department of Agriculture.

Western Australia.

A large meeting of fruit-growers was held at Kalamunda in mid-December, Mr. W. S. Logie presiding.

Mr. H. W. Soothill, Deputy Chairman of the Acquisition Committee, said that plans last season were made on the expectation of a crop of 1,500,000 bushels of Apples in W. Aust., a home consumption of 400,000 bushels, export of 100,000 bushels to the East, and export to U.K. quite uncertain. The Committee had urged a higher return than that paid by the Commonwealth Government. The abnormal heat wave had reduced crops, but despite complications and difficulties there had been no serious error. The overhead, including administration, was less than 1½d. per box. Gluts had been avoided by the use of storage. The returns to growers were better than the minimum prices in normal years. The Commonwealth Government would bear any loss on the scheme, and had provided £750,000 for the whole of Australia.

With regard to the 1940-41 Apple crop, Mr. Soothill said he expected an average return of 2/7½ per bushel to the grower. It was useless to press for a bigger return from the Commonwealth. There would be rigid inspection, and the onus would be on growers to brand their cases faithfully. Every effort would be made to absorb Apples in by-products. It would not be possible to absorb all the available fruit, and those growers who were not required to pack their crop would be compensated. The aim was to preserve the financial asset represented by the orchards. The 1940 scheme had saved W.A. growers from tragic hardship.

Mr. G. Parke, the other Growers' Representative on the Acquisition Committee, supported Mr. Soothill's remarks.

On the motion of Messrs. H. Larwood and J. Maher a resolution was unanimously carried requesting an additional representative of the growers on the Committee.

Albany: Mr. W. Mawson presided over a meeting of the Albany and District Fruit-growers' Association in early December. Mr. J. McNeil Martin, President of the W.A. Fruit-growers' Association, was also in attendance. Details of the Federal Government's acquisition plans were given by Mr. H. W. Soothill.

In the Albany and Mt. Barker districts crop prospects are good, timely rains having fallen.

Victoria.

At a meeting of the Peninsula Orchardists' Central Association held at Hastings towards the end of December a motion was unanimously carried favouring the introduction of producers' licenses to enable grower carriers to cart and sell fruit. Some growers advocated the re-introduction of the former grower marketing method at the Victoria Market, if necessary under license, the commission to be paid to the growers.

It was decided to request the postponement of acquisition until March 1, or alternatively, that 1/- per case for Gravensteins above published prices be paid for the extra cost of growing and maturing this variety.

NORTHERN VICTORIA FRUITGROWERS' ASSOCIATION.

Mr. W. Young, President of Northern Victoria Fruitgrowers' Association, recently announced his resignation from the Apple and Pear Board. Mr. Young explained that extreme pressure of private business necessitated his retirement. Mr. N. W. Fairless, the President of the Shepparton Fruitgrowers' Association, has been nominated as Mr. Young's successor.

At a meeting of the Association recently held in Kyabram, the prices for canning fruits was reviewed. Members expressed the view that having regard to the international situation and the shipping position, some sacrifice was necessary on the part of growers, and there-

(Continued on page 10.)

Blyth's "BLUE BELL" Quality Sprays

MADE IN AUSTRALIA

For Over Twenty-five Years "BLUE BELL" Arsenate of Lead has Proved a Faithful Friend to Growers.

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New South Wales: Lanes Ltd., 69 Abercrombie St., Sydney.
Queensland: A.C.F. and Shirleys Fertilizers Ltd., Brisbane.

South Australia: George Wills & Co. Ltd., Gilbert House, Gilbert Place, Adelaide.
Western Australia: F. H. Faulding & Co. Ltd., 313 Murray Street, Perth.

Works: PRAHRAN GROVE, ELSTERNWICK, VICTORIA

L 1468.

Growers' Licenses Wanted

To Sell Own Fruit

A LARGELY attended meeting of fruit growers was held in the Town Hall, Box Hill, Victoria, on December 6, when several resolutions were carried. There were about 300 persons present. The meeting was arranged by the Fruit-growers' Defence League and chaired by its President, Mr. F. A. Bloom.

The speakers included Hon. J. Cain, M.L.A., Leader of the State Labor Party, Hon. G. L. Chandler, M.L.C., Southern Province, Sir William Angliss, M.L.C., Southern Province, Hon. C. E. Isaac, M.L.C., South East Province, and J. M. Ward, Superintendent of Agriculture, who attended by invitation. Apologies were tendered by Hon. T. Hallway, Col. Ryan, Messrs. W. J. Hutchison, W. H. Everard, C. Frost, J. B. Mills (Chairman Apple and Pear Board), and E. J. Hogan, Minister for Agriculture, who had all been invited to attend.

At a meeting representing various organisations held during the afternoon, several resolutions were recorded for presentation at the above meeting. The Secretary, Mr. Honeybun, reported upon the afternoon conference.

Mr. J. Ward, who attended as a representative of the Depart-

ment of Agriculture, outlined the conferences that had been held at Canberra, Sydney and Melbourne, at which delegates from growers' organisations were present when a review of the marketing system proposed and the rates of payment to be made were discussed. Upon pressure from Mr. Hogan and Victorian delegates, the prices now announced had been increased from those submitted by other delegates and were eventually decided upon by the Federal Government as operative for the 1941 Acquisition Scheme. Many details have still to be worked out, and provision is being made for an extra grower representative upon the Committee.

Mr. Cain submitted that under the national emergency, no one section of the community should be expected to bear more sacrifice than other sections. He still contends that the scheme of a year ago should not have been forced upon the industry without any indication of the wishes of growers. In his opinion the scheme takes away the individuality of the grower and makes the cost of distribution too high whilst high retail prices limit consumption. But the scheme is now to operate for another season, and he urged growers to co-operate and make the

best of it. He approves of the suggestion of growers' licenses by which, under certain conditions, growers should be entitled to market their own fruit if they so desire.

Mr. Isaac realised that growers are not getting a fair deal, but the problem is how to improve conditions. Growers need all the outside assistance they can get, and this will be forthcoming from members of Parliament, if they are made acquainted with the many factors involved. The problem is not one for political parties and it must not be made such. The consumer, because he represents the majority of votes, must also be considered. If the consumer can be shown that he can get better and cheaper fruit, he will support any practical scheme.

Mr. Chandler had attended many meeting of growers. His activities in the House on behalf of growers had not received the support that they should have done. Unfortunately, private members had consistently opposed his efforts to secure better conditions for the grower. The present trend of the Government is to have everything run by Boards. He failed to see how the scheme could be overthrown during the war because it was one of many attempts to meet the special conditions that war imposes. He urged growers to make the best of it and to organise the industry so that combined efforts could be made in its interests. He strongly approved of the growers' agency system for marketing.

His Bill for a reduction of excess water rates to primary producers was passed by the State Legislative Council, but unfortunately the Premier had refused to allow the Bill to go forward to the assembly during this season. He hoped that it would be considered during next session.

Sir William Angliss said that in 30 years of Parliamentary experience he can remember no section of primary producers which has asked for less than orchardists are now asking. He approves of growers' agencies and believes that, under that system, more fruit would be sold and consumers' would get it at a lower price, while the growers would receive a better return.

Resolutions.

Three resolutions were unanimously carried at the meeting as follows:—

1. Moved by Mr. Handasyde, Wantirna: "That in the event of the Acquisition Scheme being continued, this meeting requests Government to introduce growers' agencies to allow them to sell their own fruit if desired."
2. Moved by Mr. Noble, Tyabb: "That this meeting of Victorian fruitgrowers does not accept the proposals of the Federal Apple and Pear Acquisition Scheme, as we are convinced that the prices as submitted to growers are below actual production costs."

3. Moved by Mr. Barclay, Tyabb: "That this meeting requests the Victorian Government to take steps to exempt from the Acquisition Scheme, all early varieties of Apples not normally exported and which are marketed before April 1."

N.Z. FRUIT INDUSTRY.

THE NEW ZEALAND GOVERNMENT desired to assist the fruitgrowers, hence the acceptance of a marketing plan, stated the Minister for Marketing (Hon. W. Nash) early in December.

"The Government did not take on the marketing of Apples and Pears because it wanted to. It was done at the request of the growers," continued the Minister.

In a detailed statement in the House of Representatives, Mr. Nash said that Apples were sold to the public at low prices—3/6 to 4/- per case at one period—knowing there would be a loss, but there were storage difficulties because of the space needed for butter and cheese. Only 580,000 bushels were exported last season. The loss on the local market was close to £200,000, while the surplus overseas was a little more than that sum.

The Department sold 245,000 cases at a fraction more than 1½d. per lb. in May, and 180,000 cases at an average of 5/10 a case in June. In one period of seven weeks it had 1,150,000 cases to market, while from February 9 to May 3 it had 1,870,000 cases.

No Exports in 1941.

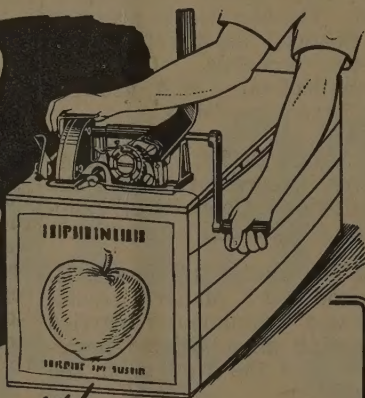
The wastage in the season just concluded was less than the average, the Minister continued. He was certain the Government and the Department had faced unprecedented difficulties in having a double supply, and had achieved remarkable results, with some mistakes. Having made those mistakes, he hoped they would profit from them for the future.

"We should try to find a way to assist the fruitgrowers, particularly those on a low economy," Mr. Nash added. "We may pay a little more in the coming season, but the House must not criticise if we make a greater loss, because the evidence is pretty clear that we won't get any fruit away this year."

The Lemon Position.

"With regard to Lemons," the Minister stated, "the Internal Marketing Department paid a better price to growers than they have received for any of the previous five years. A fair amount of money has been lost, but not so much as on Apples. The average previously was 5/9 to 6/3 per case, but in 1940 the Department purchased all Lemons at 7/- a case."

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Victorian News and Notes

How the Department of Agriculture Assists

Research and Experiments

At the annual meeting of the Quantong Fruit Growers' Association recently, and reported briefly in our last issue, Mr. J. L. Provan, Senior Horticultural Instructor, Vic., told growers how the Department of Agriculture, through its Horticultural Division, is assisting the fruit industry.

Outlining some of the activities of the Horticultural Division, Mr. Provan mentioned that apart from the usual inspection in markets, shops, at the Railways and on the wharves, and the orchard supervision work, the research staff, under Mr. C. E. Cole, was investigating a number of problems to assist the fruitgrower. Among Apples and Pears, 17 fertiliser plots have been established in various parts of the State. A root-stock trial on Apples was being conducted at Hastings, and on Pears at the Horticultural Research Station, where fertiliser and irrigation studies were also included. Biennial bearing research was being continued, and the mineral deficiency work on fruit trees in pots at the School of Horticulture, Burnley, which have already been in progress for nine years, was continuing.

Fertiliser Trials.

Fertiliser and pruning trials were taking place in the Rochester district on Prunes in order to increase the yield and grade. Vine problems were also being studied, and manuring, pruning and trellising of table varieties at Tresco, Woorinen and Merbein, and fertiliser and root stock trials at Wahgunyah and Rutherglen were included in this vine programme.

At the Horticultural Research Station at Tatura, where 35 acres had already been planted, fertilisation and irrigation and pruning investigations were being conducted on canning Peaches. In addition to these, there was also a fertiliser experiment on canning Peaches at Kyabram.

The manurial experiment on dessert Peaches at Templestowe had been completed and the results were published in the "Journal of Agriculture," September, 1940.

Citrus Work.

Citrus investigations were proceeding at Irymple, where the root-stock trials on Washington Navel and Valencia Late Oranges were commenced in 1931. At Merbein, Long Lake and Wangaratta, fertiliser experiments were being conducted on Washington Navels. Re-working of citrus trees was continuing and results of this work

were beginning to be apparent in the improved quality of the fruit from younger orchards.

Tomatoes.

Tomatoes, which have become a very important crop, have also been included in the research programme of the Department. Variety trials, breeding and fertilising experiments were being conducted at Tatura, and on plots scattered throughout the Tomato growing districts of the State. It was originally intended that two plots should be established in Quantong, but owing to lack of adequate water supply, only one plot was established. On all these particular plots, cultural methods and diseases and insect pest control were also under observation.

In addition to these research projects, various other investigations were being undertaken. Included in the programme were Boron applications, Chlorosis on various trees, Root Borer, Variegation of foliage, Fruit Drop of Apples, Grapefruit and Pears, and the use of Hormomone A in preventing this.

Mr. Tindale's work on the cool storage of fruit had received world-wide recognition, and it was pleasing to know that such valuable original research work was being done in Victoria.

Diseases.

As well as this rather large research programme, a big development had occurred in the instructional work. One of the chief advisory services now

available to growers was that of the Apple and Pear Demonstration Plots for the control of Codling Moth and Black Spot. There were now 59 centres on which 10 Codling Moth lures were maintained to provide data to act as a basis for advising growers when to spray for Codling Moth. Last year the total number of Moths caught on the plots was 45,000. The average moth catch per lure pot last season was 73, and the maximum number of moths caught in 10 lures in one week was 427.

On the plots directly under the control of officers of the Department, but sprayed by the growers, the average percentage infection of Apples, including all windfalls, etc., was 7 per cent., and on Pears 2½ per cent. At present, 44 lure charts were maintained in Apple and Pear growing districts for the advisory services. In some districts the direct postal circular system of advice had been established, and this had proved very satisfactory, and many growers had expressed their appreciation of these services. Approximately 1,000 growers were included in this direct circular system. About 100 growers in the Quantong to Amphitheatre districts were receiving advice in this manner.

Broadcast spray advices were being made over Stations 3SR Shepparton, and 3GL Geelong. In a great many orchards in the State, the plots and advisory services have definitely improved the control of Codling Moth and Black Spot.

Another Packing Instructor was appointed to the staff in February, and Tomato packing instruction would be available in the Quantong district during January and February.

Mr. Provan also referred to the serious position which a lack of water might cause in the district. Water was essential not only to produce the fruit for this season, but to keep the trees in good condition for subsequent years. Not only the quantity of water but also its quality must be carefully considered, but Mr. Clark, of the State Rivers and Water Supply Commission, had stated there would be sufficient for growers in the area this season.

Mr. Clark stated that it had been decided to commence the Rifle Butts scheme for the supply of water, and £50,000 had been granted for this purpose. In conclusion, Mr. Provan stated that Departmental officers were available at all times to assist them to produce heavy crops and good quality fruit.



Bed of young Loquat trees at the nursery of Mr. L. J. Wicks, Highbury East, S.A.

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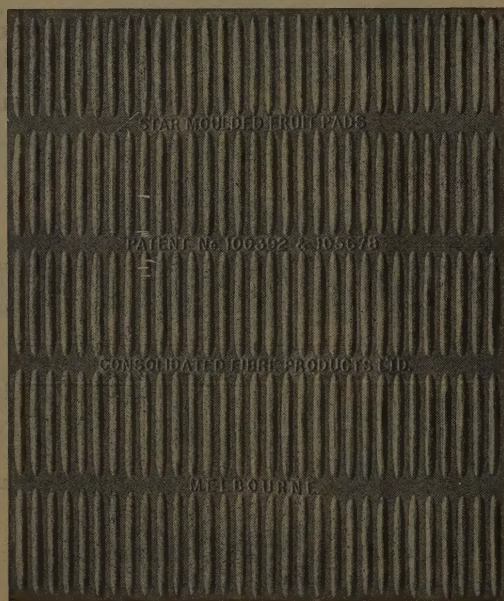
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Victorian News and Notes—(Cont'd)

Discharge of Salted Drainage Water into the Murray River

(By R. N. Voullaire, Merbein.)

OWING to Merbein growers becoming alarmed at the possible effect of the discharge of salted water into the Murray in close proximity to the Merbein pump section basin, Mr. A. V. Lyon, M.Ag.Sc., and Mr. McConchie were recently invited to attend and discuss the subject with growers.

The discussion revealed the points that both these officers had long realised—the possibilities of trouble eventuating—and had dealt very effectively with the situation as it developed. Consequently the growers are now well satisfied that the situation is well in hand.

Mr. McConchie's address to the growers revealed the following points:—

During Summer of 1938-39, which was a very dry year and low river, pumping was practically restricted to lock pools with no overflow coming from Lock 11 (eleven). But a flush coming down the Darling River and backing up to Merbein had kept this settlement happy. Mr. Lyon was asked to test for salinity and had found that the drainage water from the lake, discharging near the pump intake, was higher in salt content than the river water. Mr. McConchie had made a quick survey, seeking possibilities for the diversion of lake overflow to other points. Later the lake overflow was temporarily cut off, and the lake level rose quickly. Fortunately, rains intervened and water was freshened by a flush from the upstream weir. The river was now well regulated, and he was confident that, with regulated flows from upstream, the amount of outflow from drainage from Lake Hawthorne did not represent more than one per cent. of the water flow of the river at point of discharge.

Attempts to divert this to a point below the pumps would be very costly, and of doubtful advantage, as "back flow" might occur at times from the downstream weir. The proposed diversion was to a point about one mile above the pump intake, to a bend which would deflect the drainage water northwards (thus facilitating fusion). This new outlet would also make for a more effective "flushing" of the lake in event of a high river. Another result would be to eliminate surrounding unsightly swamps. This new outfall was designed to drain the lake should this be necessary, but at present approximately 5 ft. of water depth would remain owing to other obstructions, such as the railway culverts. The lake level would be dropped sufficiently from its present level to permit the outlets to be closed during

irrigations and to release the impounded waters later without danger of the level rise causing damage to surrounding holdings. He expected the job would be completed by Christmas.

Mr. Lyon's talk disclosed these interesting points:—The rate of "fusion" of salt water into a freak stream was slow. Salt water did not mix readily with the fresh stream, therefore the advisability to discharge some distance away from pump suction. Another factor was that the salt content of streams varied according to depth, and allowance should be made to adjust the "suction depth" of the pump to that of the water "band," the least impregnated with salt.

The three main objectives to be observed were:—

1. Deliver drainage outflow well away from pumps.
2. Determine the lowest salt water level and adjust the pump intake to suit.
3. Make provision to lower the lake level to permit it to be used as a reservoir between waterings.

The lake "evaporation factor" was equal to approximately 5 ft. of water depth per year, therefore condensation would densify the salt in the lake, but this would only be a worry if it was not regulated and checked. The work of diverting, etc., was designed to give effect to this objective.

Replying to questions re the possibilities of water shortage during extended drought years and the "preferential" scale of regulation of available supply in event of shortage of supply, Mr. Lyon explained that first preference would apply to plantations of permanent establishments and permanent pastures would receive equal consideration to vines, trees, etc.

During the discussion Mr. Lyon passed the interesting comment that four climatic records were broken during recent years:—

1. A record of continuous heat.
2. Coolest weather for October-November.
3. Highest March temperatures.
4. Three days of October record temperatures.

Therefore it was logical to assume that future weather effects and water storage supplies were difficult to forecast.

Pomonal.

At the annual meeting of the Pomonal Fruitgrowers' Association, Mr. Andrew Anderson was re-elected Secretary, and Mr. W. H. Lempriere, President.

Victoria (continued)

MERBEIN ANNUAL REPORT.

Presenting the tenth annual report of the Merbein Fruit Growers' Union, Mr. A. Rawlings, President, stated that everybody must assist the Government in meeting war conditions and must not expect to make extra profit out of the national emergency. The 1940 pack of dried fruits was a record and Australian consumption is increasing, as are also exports to New Zealand and Canada. All congratulate the various State Boards upon so successfully handling the 1940 crop under abnormal conditions.

He reported upon the success of the Merbein Field Day and advised more of such fixtures. Representations are in hand for the maintenance of water channels and the extension of the period before interest is charged upon water rates to relieve the grower and packer during the harvesting season. Affiliation had been made with the Rural Water Users' Association of Victoria, which will watch the interests of growers regarding charges, rates, interest, storage and administration.

The following officers were elected: — President, Mr. A. Rawlings; Vice-President, Mr. D. A. Walters; Treasurer, Mr. E. W. Smith; Secretary, Mr. G. J. Hyndman; Delegates to A.D.F.A., President, Vice-President, and Secretary.

United Berry Growers' Association.

The United Berry Growers' Association of Victoria consists of a live body of growers, the Secretary being Mr. D. Campbell, of Wandin. The policy of this Association is to try and better the general conditions of the industry, viz.: marketing problems, research work, direct selling to the consumer per medium of the Victorian Railway system through which channels they sold approximately 26,000 lbs. of berry fruits last season, which relieves the local market.

Membership extends from Monbulk, The Patch, Kalorama, Silvan, Wandin and Seville.

PACKING CLASSES FOR ADULTS.

Meeting Labor Shortage.

The Victorian Department of Agriculture is to be commended for arranging classes for adults to learn the art of packing Apples and Pears in fruit-growing areas to overcome some of the difficulty of labor shortage. During January and February, such classes for women and girls as well as men and youths outside military age will be in operation. No fees are charged for the instruction by qualified officers.

MELBA STRAWBERRIES.

Free From Virus Disease.

Following losses in Victoria resulting from Strawberry virus disease in recent years, the popular Melba variety has almost disappeared, but efforts are being made by the Department of Agriculture to reintroduce the variety with resistant stock. Some 14,000 seedlings were procured from W.A., where the variety is free from the disease, and after acclimatisation at Burnley they were planted out at Silvan and are being kept under constant observation. If the tests prove successful, seedlings will be released next season, augmented by further supplies from W.A., and disease-free plants propagated to replenish Victoria's diminished supplies.

THE TOMATO INDUSTRY.

Stabilisation Efforts in Victoria.

Seeking the stabilisation and organisation of the Tomato industry in Victoria, negotiations were recently initiated between representatives of some 50 proprietary and co-operative factories and growers, and the Minister of Agriculture (Mr. Hogan), in December, when Mr. L. Pither, State President, presented the case for Victorian growers.

Reproduction of Tomatoes, particularly for manufacturing purposes, has increased ten times in the past decade, until there are now 8,000 acres under production, yielding approximately 4,000,000 bushels valued at something like \$500,000. In that period Shepparton had largely changed from table trade production to factory trade production, with some disadvantages incurred by share-farming and the absorption into the ranks of growers of large numbers of Southern Europeans, explained Mr. Pither when addressing the Shepparton Tomato Growers' Association.

Certain disadvantages arising from changes quoted, indicates how necessary it becomes to effect some form of stabilisation, an improvement in quality and varieties, research work, including assistance from the Department of Agriculture, and the factories and such stabilisation of prices that will give the grower a reasonable return for his work and capital invested.

Amongst several suggestions made by the speaker were:—Committees representing factories to investigate all manufacturing problems. Growers' Committees to deal with all production and control problems. Co-operative authority to consider matters of interest to both sections affecting contracts, price, quality, quantity, conditions of sale, restrictions that may be necessary from time to time, the release of marketing reports and statistics, purchase of Tomatoes from grower-members of recognised associations and the appointment of a capable person to co-ordinate the activities of both sections and a more orderly form of marketing and distribution.

:: :: ::

The Executive of the Bendigo branch of the Tomato Growers' Association of Victoria, assented to the proposals for organising the industry, by means of panels of growers and manufacturers—the manufacturers to collect the needed levies and the growers to enter into contracts to ensure continued production of quality fruit.

White Oil Sprays on Citrus

Application and Effect.

It is advisable to give thought to the time of application and the effect of white oil sprays on citrus trees not only at the time of spraying, but in the months ahead, said Mr. R. R. Roberts, Orchard Supervisor, Mildura, in a radio talk recently.

That there are certain danger periods is an established fact, and spraying during these periods may do incalculable harm, both to the tree and the fruit.

While an occasional oil spray cannot do much harm, the ill effects of repeated heavy oil sprays during the late Autumn and early Winter should be carefully noted and guarded against. An oil spray applied at these times will react on the blossoming in the coming Spring.

It may accentuate the drop of mature fruit; interfere with the gas coloring of fruit, and

increase the susceptibility of tree-ripened Navels to decay.

An oil spray applied in the Spring, i.e., October and November, may cause an excessive "drop" of immature fruit, and may result in the loss of the entire crop. It is not advisable to apply an oil spray coinciding with the setting of fruit, or during the periods when the normal "drop" takes place.

Citrus trees should not be oil sprayed when the temperatures persist above 100 deg. F. or when they are showing distress from lack of water.

Spraying under these conditions usually causes fruit burn, and is responsible for an excessive leaf fall.

Most of these troubles can be avoided by close attention to the type of oil used and restricting the periods of application to the months of January, February and March.

SOOTY MOULDS.

Control of Insects.

Sooty Moulds cause much damage in N.S.W., according to the Department of Agriculture Notes, covering the leaves, stems and fruit with a sooty mass of fungous threads and greatly disfiguring the tree. The first sign of the fungus may be a thin greyish mould, but the black color is soon observed. Sooty Moulds are always associated with the presence of scale insects or aphids. They do not attack the citrus tissue but are entirely superficial and live on the honeydew excreted by the insects.

If the insects are few the development of the fungus may be slight, but if the honeydew is abundant, the entire surface of the leaves, twigs and fruit may be covered. When the growth is thick, parts of the membrane may fall off in flakes.

When the amount of Sooty Mould is small the effect on the tree may be negligible, but if there is an abundance of it, the vigor of the tree may be reduced because of the interference with the function of the leaves, the growth may be retarded and the blossoming light. Fruits which are covered with the fungus are late to ripen and usually color unevenly.

Since the development of Sooty Mould depends on the presence of insects, steps should be taken to control the insects. Once these have been eliminated the Sooty Mould soon disappears because of the absence of a suitable medium on which to grow.

1. Prior to spraying, prune out any dead or seriously affected limbs.

2. Treat the tree for scale insects or aphids according to the recommendations in leaflets obtainable from the Department of Agriculture.

SOIL NUTRITION TESTS.

Experiments in W.A. With Vegetables.

Tests made in W.A., reported in the State "Journal of Agriculture," to ascertain how the application of artificial manures affects crops is interesting. On certain marly peat soils, manganese sulphate benefited Potatoes, Beans, Cabbage, Swedes, Turnips, Tomatoes and Peas; copper sulphate added to manganese improved Cabbage, Swedes, Turnips, Tomatoes and Peas; latter having full pods. On black acid-sandy soil, the addition of commercial sulph. copper, manganese, zinc, and borax at the rate of 20 lb. each per acre, increased the yield, reduced the need for heavy dressings of fertiliser, and eliminated Stem-end Rot. Seed Potatoes from plots receiving copper were of higher quality and had strong, sturdy shoots.



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Brown Rot in Peaches

Control Methods Described

(By F. J. Bullock, Government Orchard Supervisor, Kyabram, Vic.)

IN THE ORCHARD there are few diseases which cause such devastation in such a short time as Brown Rot of Peaches. This disease caused the destruction of considerable quantities of fruit until satisfactory control methods were obtained by experiments carried out over a number of years.

These experiments revealed that the quantity of spores or seeds of the disease capable of affecting the flowers or fruit were reduced by the removal and destruction, during the pruning season, of all dead or affected twigs or laterals and mummified fruit on the trees.

While it may seem safe to "plough under" the mummified fruit during the Autumn, it actually assists spore formation

in a normal wet Winter. This emphasises the necessity for the complete destruction of this fruit.

For control a cover spray of Bordeaux mixture 6:6:40 (6 lb. copper sulphate and 6 lb. hydrated lime to 40 gallons of water) should be applied at the "pink-bud" stage, care being taken to ensure that every bud is covered. Dry-mix lime sulphur at the rate of 25 lb. to 100 gallons of water should be applied at "petal fall" and thereafter at monthly intervals, the last spray being applied four to six weeks before picking. With this spray it is essential that every section of the fruit and leaves be covered. The mixture is made up of 16 lb. of sulphur, 8 lb. of hydrated lime, and 1 lb. of casein.

Careful attention to these details will ensure satisfactory control of "Brown Rot."

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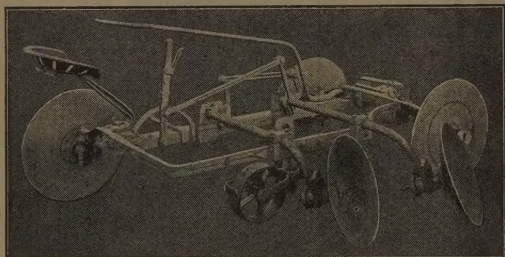
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ARE YOU

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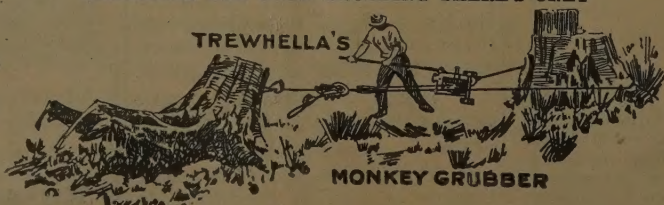
Previous experience had convinced me that to be really efficient a grubbing machine should have ample power and ropes that will meet the heavy demands required of them. I found that shovel and axe work is very costly either by itself or in conjunction with a machine. The machine that offered these features with a host of others, was **THE "MONKEY" GRUBBER.**

It gave me the power of 260 pairs of hands in a simple and compact form; the lever is short, so that I am able to stand firm-footed and get the full stroke. There are two speeds in the machine, as well as an automatic release that allows me to let off a strain, or as the machine will work in any position, it comes in for all jobs that would require a chain block. It is taken to work in a few minutes. The ropes are in lengths that I find easy to handle, and each one is fitted with hook and loop couplings, so simple and absolutely IT for effectiveness. The makers have included a sturdy snatch block with a novel method of securing to the ropes, and also a fine type of firm gripping rope shortener. The latter makes it very easy to accommodate the lengths of rope to the tree or stump being pulled, and is quickly released from the rope. The combination of so many time and labor saving features makes the "Monkey" Grubber a superior grubbing outfit.

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Merchants, South
and West Australia.

TREWHELLA BROS. Pty. Ltd. Trentham, Vic.

FRESH FRUIT FOR TROOPS.

Canada's New Ration Scale.

Included in the new scale of rations for Canada's troops recently sanctioned, are fresh Apples and vegetables. Six to eight ounces of vegetables per man per day is authorised. The scale allows four eggs per man per week; eight to 10 oz. fresh milk; wider variety of fresh meat and honey, treacle, and choice of jam in place of the old bully beef and Plum and Apple jam.

Cooks will be entitled to draw from Army stores flour, baking powder, and shortening, to make scones and cakes instead of, or alternative to, bread.

MAIZE BOARD ELECTIONS.

Three out of four sitting members of the Victorian Maize Board were re-elected on December 11, when a poll of about 500 growers was taken. In the four zones, the returns were:—

Area 1: J. W. Lynn (Orbost), 65 votes; P. C. Nixon, Junr. (Orbost), 16.

Area 2: D. E. Timmins (Mossiface), 125 votes; H. Clues (Johnsonville), 46.

Area 3: A. S. Telfer, Chairman (Walpa), returned unopposed.

Area 4: H. D. Kelly (Boisdale), 119; T. Harvey (Boisdale), 53.

(Continued from page 5.)

fore the proposals were acceptable.

The Ardmona Fruit Products has received a severe blow in the recent deaths of two directors in the persons of Mr. A. Pyke and Cr. E. M. Little. These two gentlemen gave valuable service to the company and they will be greatly missed by all, and their places hard to fill.

A severe dust storm accompanied by hot winds passed over the Goulburn Valley on December 27, which ended in a thunderstorm and a little rain. Thousands of cases of W.B.C. Pears were blown from the trees, and the ground is strewn with green fruit.

Goulburn Valley, Vic., Dec. 27, 1940.

THE CITRUS INDUSTRY

Better Orange Quality?

Is it Wanted?

THE production of quality rather than quantity should be the aim of citrus growers, states Mr. R. J. Benton, Fruit Instructor of N.S.W. Dept. of Agriculture. He points out that Australia only produced 0.57 bushels of citrus fruit per capita compared with U.S.A. production of 1.6 bushels, and as both countries normally export about the same proportion of total production, the local consumption in Australia should be increased.

Owing to a definite demand for citrus fruits here the production of fruit of quality rather than in quantity has not become an essential duty for us. Many growers find it most profitable to maintain their trees in a vigorous condition with ample manure and water. Gross and unpalatable—at least, to a critical taste—though the fruit be, production is still very profitable. So why change?

It is doubtful, too, whether higher quality fruit, if produced, would be always recognised in the trade and paid for accordingly. In some instances, quality meets with due recognition, but, in others, unbusiness-like distribution results in better fruit being sold at a comparative sacrifice. There are a

few indications that consumers desire better quality Oranges than they can usually procure, and this demand must increase. Unfortunately, too, there are many who do not appreciate any differences in the quality they purchase.

The production of high-quality fruit in quantity is a problem for the individual grower. Many different soil types, varying mean temperatures, and erratic rainfall upsetting calculations as to soil moisture and its effects on tree nutrition are only some of the difficulties which are general in our widely-planted areas. Some factors in production of quantity and better quality, however, are more or less controllable, including the effect of cultivation. Fertilising and soil moisture are other factors which are only controllable in their effect if rainfall is insignificant. Thus seasonal effects on quality are likely to be apparent.

Much fruit during the present season has been affected both internally and on its exterior. On the light, sandy, wind-created sandhills of the Upper Murray this condition has been especially noticeable. Heavily producing trees are usually less affected, but even in these cases, thicker, coarser rinds are more apparent than is desirable. Why should such be the case? Droughty conditions being so general, soil moisture was governable to a greater degree than usual.

It would appear probable that the physical difficulty of supplying the trees' demands for moisture was a factor which resulted in an intermittent development of the growing fruit. This difficulty can be intensified by too frequently stirring the soil. The sandy land gets intensely hot, and, by prohibition of weed-growth in mid and late Summer, by increased aeration and probably some destruction of root fibre, injurious results are more than likely. Sandy soils are likely to be wind-blown, thus causing further depreciation of quality. It would appear well worthwhile under such conditions, setting aside a section of trees for production under a reduced standard of cultivation and weed promotion system.

ORANGES FOR SOLDIERS.

The South African Farmers' Weekly reports that growers have responded liberally to the call for Oranges for the British fighting forces overseas. Shipping companies agreed to transport free 3,000 cases. After that quantity has been sent, growers donating fruit will pay freight charges. Other than overseas gifts, growers in South Africa are also donating large quantities of Oranges to soldier camps within the Union.

CITRUS CULTURE IN CALIFORNIA.

Community Scale Control.

The Los Angeles district is eminently suitable for the production of high quality fruit, said R. M. Voullaire, Jr., of Merbein, in an interview with a representative of "Sunraysia Daily" recently. An average temperature of around 90 degrees and deep alluvial soil favors fruit-growing, and the low humidity ensures a condition conducive to thin-skinned Oranges.

Effective wind-breaks minimise skin damage and growers provide dense wind-breaks consisting mainly of Pinus Sylvestris. One thing conducive to uniform quality is the contract system by which skilled contractors operate the groves under the administration of the grower. The community control of scale is followed and the cost is borne by a levy per case of fruit which covers the cost of plant and fumigation, apart from labor charges.

GRAPEFRUIT FOR HEALTH.

Experiments in Prisons.

It has long been claimed that citrus fruits increase health and help to control disease, but it comes as a surprise the 42 prisons in U.S.A. were used in a 2-year test upon the health of the inmates of the value of Grapefruit juice. Mr. A. B. Hale, of the Florida State Highways Board, conducted an experiment to find the result of citrus fruits on the health of the prisoners.

He states that sickness was lessened, medical costs cut, colds curbed and less time off was recorded following the serving of a half Grapefruit of 8 oz. of juice twice daily. In prisons where manufacturing was conducted, fewer men reported sick and saved 162 hours of work per year. He stated that the cost of supplying the fruit was more than offset by savings in medical attendance and extra output from prison factories.

CITRUS BRIEFS.

A large chain of stores in California will experiment in selling all fruit and vegetables by weight instead of count or bunch.

The President of a large citrus Association, addressing members of the Los Angeles Farm Bureau, urged increased advertising to lift the season's crop.

According to specialists of the University of California, it takes 850 man hours per year to run a 10-acre citrus orchard, but then they have never run an orchard.

NEW CITRUS VARIETY.

The Pearl Tangelo.

A new citrus variety is reported from Florida. It is a cross of Grapefruit or Pomelo with Mandarin or Tangerine. It resembles a small Orange in appearance, is solid and juicy and has a mild but distinctive flavor. It grows a large and vigorous tree, very dense without pruning, though moderate pruning is advised to prevent killing of inner branches by dense shade.

The fruit averages 4 or 5 to the lb. and packs 288 to 360 to an Orange case. Shape regular, rind moderately grained, color an orange yellow, oil glands numerous and large, oil abundant, odor mild and pleasant, rind thin, segments 10 to 13, membrane tender. The fruit is said by California Citrograph to be best suited for juice or slicing.

ORANGE JUICE FOR CHILDREN.

Prevents Colds — Helps Teeth.

High Schools in America generally provide cafeterias for meal service to students, and many are now serving Orange juice at a nominal cost because it has been found that it has an alkalising effect in preventing colds because of the Vitamin C which it contains. Dentists also recommend Orange juice to give nutritional benefits to teeth and gums. Apart from its appeal to the palate, Orange juice is therefore a good drink and should be included in greater quantity in the daily menu.

THE FRUIT WORLD ANNUAL.

The 1941 edition of the Fruit World Annual is in the hands of the printers. This valuable production contains a complete statistical review of all sections of the industry, together with colored pictures showing the latest methods of pest control. Details are given of the interstate movements of fruit and vegetables in Australia. There are articles on pruning, manuring, cool storage, nut culture, also a complete list of the fruit-growers' associations throughout the Commonwealth.

Citrus Growers

GET YOUR VALENCIAS AND LEMONS COLOURED.

Skin and Quality definitely improved

... at ...

Betta Pack Fruit Storage Co. Pty. Ltd.

436 QUEEN ST., MELBOURNE
(Opposite Victoria Market)

Tel., F 3093. Prices moderate.

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Cork Board — Cork
Sectional Pipe Covering — Granulated
Cork.

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Goodman's FRUIT TREES

Reliable producers, budded from the better bearing orchards. All varieties. Packing Free. Send for Catalogue.

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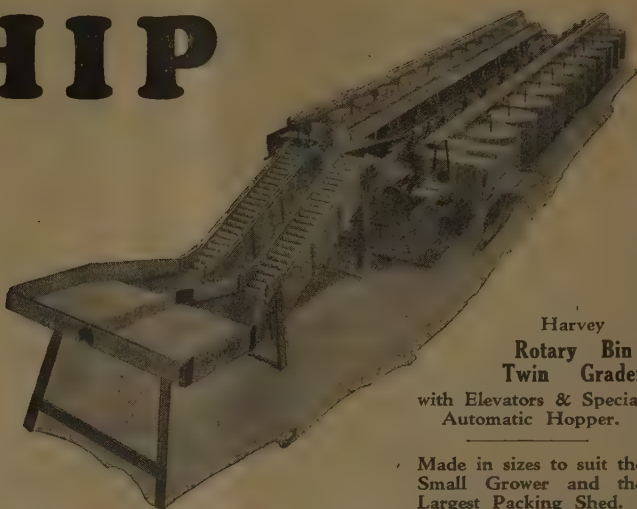
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INTRODUCING

Rotary Bin Grading Equipment

OUTSTANDING ADVANTAGES:

"Harvey" Rotary Bins considerably increase average daily output. Stem punctures and bruising eliminated. The packing surface in the bin slowly passes the Packer—no pawing of fruit by Packer. Packers average 10% to 15% more output per day with less fatigue. Handles the most tender variety of Apples and Pears without injury. Deflectors to run the predominating sizes into two or more bins—no time lost by throwing the major bulk of work on to one or two Packers.



Harvey
Rotary Bin
Twin Grader
with Elevators & Special
Automatic Hopper.

Made in sizes to suit the
Small Grower and the
Largest Packing Shed.

Citrus Graders, Citrus Polishing Machines and Packing House Equipment

BRYTENE PLANTS
CITRUS PROCESSING PLANTS
SORTING TABLES
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WAXING PLANTS
GRAVITY CONVEYORS
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CITRUS WASHING & STERILISING PLANTS (Hot or Cold)
COOL STORE TROLRIES AND TRUCKS
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CITRUS POLISHING MACHINES
TOMATO GRADERS
PASSIONFRUIT GRADERS

The "Harvey" Citrus Washing Plants
SAVE SPACE — CAN BE USED WITH HOT OR COLD WATER.

Fruitgrowers— The "Harvey" Air Re-Circulation Dehydrator

Solves the Problem of
Marketing The Fruit Crop

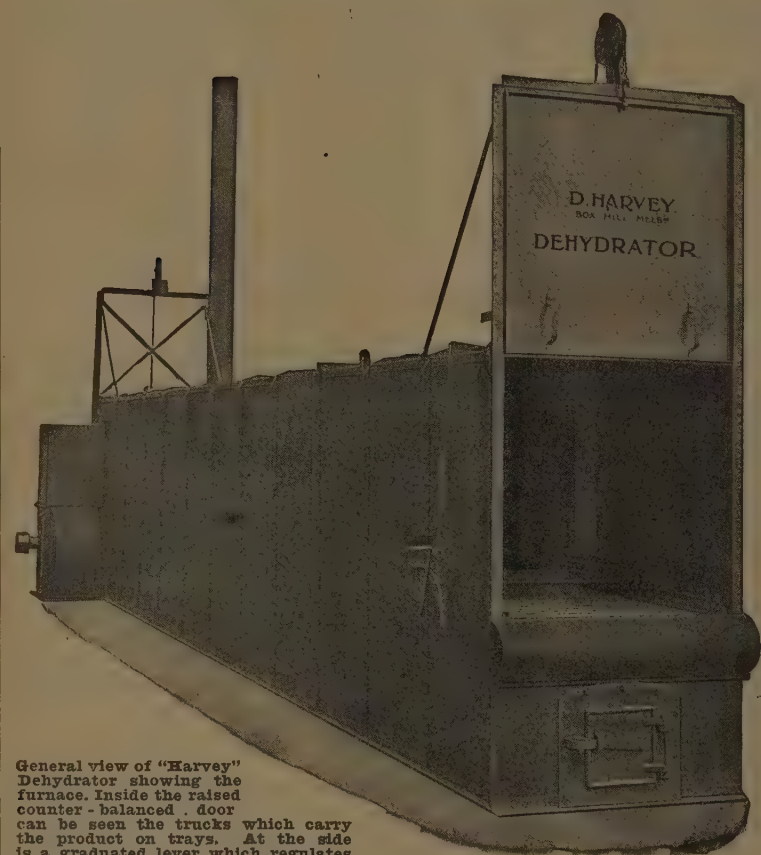
SUCH AS APPLES, PEARS, PRUNES, APRICOTS, PEACHES,
SULTANAS, Etc.

It is the best, cheapest, and most efficient type of dehydrator known. Used by all the most up-to-date Packing Houses and Sheds.

Large Output — Economical to Operate

The Fruit is placed in one end and comes out at the other dried to Perfection.

REMOVE SPRAY WITH THE "HARVEY" NEW HORSE HAIR
BELT TYPE POLISHING MACHINE.



General view of "Harvey" Dehydrator showing the furnace. Inside the raised counter-balanced door can be seen the trucks which carry the product on trays. At the side is a graduated lever which regulates automatically the dry and moist air. The blower and stack are shown in the distance.

"HARVEY" IMPLEMENTS Make Good Work Easy



"HARVEY" PATENT OFFSET TANDEM DISC CULTIVATOR: Cultivates right up to the butts of the trees or vines while the Tractor is driven right out in the middle of the row.

Proved to be an excellent machine for deeply cultivating heavy irrigation land.



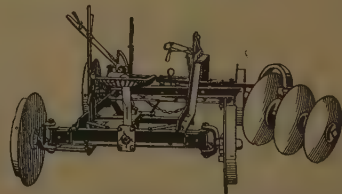
"HARVEY" 3-FURROW TRACTOR POWER LIFT H27 MOULDBOARD ORCHARD PLOW: A one-man job. Built in sizes from two to six furrows.



THE BEETLEBACK cuts out all hard working under citrus trees, and keeps the ground level. It lifts up the branches, cultivates under them, and gently replaces them on the ground.



THE "HARVEY" LANCIA DISC PLOW is designed specially for the hardest kind of plowing. Low overhead clearance for low overhanging trees. Can be racked over for both plowing close up to and away from the trees. Equipped with the famous "HARVEY" Power Lift or Screw Lifts which are operated from the seat of the Tractor.



"HARVEY" built "PETTY" PLOW: Plows out strips which have not been plowed for years. Cuts through couch grass with the greatest of ease. Also plows up to the trees and in the centre. DISC CULTIVATING GANG can be attached in place of Disc Plow Gang.

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for Every Need

Agents in All States

FRUIT GROWERS, VIGNERONS and CITRUS GROWERS — OBTAIN YOUR REQUIREMENTS FROM:—

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Orchard Implement Specialists
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Southern Tasmania—Southern Implement & Machinery Coy., Market Place, Hobart.
Queensland: Euzacott (Queensland) Ltd., 443 Adelaide St., Brisbane.
S.A.—Cole & Woodham, Box 12, Renmark.

New South Wales News & Notes

Murrumbidgee Irrigation Areas

APRICOT AND PEACH HARVESTING — PROGRESS AT LEETON CANNERY — IRRIGATION RESEARCH CONFERENCE — PROTEST AGAINST PROPOSED SNOWY RIVER HYDRO-ELECTRIC SCHEME — FIELD DAY AT BALLINGALL AND OBSERVATION OF CONTOUR WATERING.

(By Our Correspondent.)

The Apricot crop is now in full swing, and all growers are busy picking for the canneries.

The Griffith crop will go to the Sydney canneries through the medium of the Griffith Producers Co-op. Coy., while all Leeton fruit will be canned locally. The earlier fruit was marketed on the fresh fruit markets, and commanded excellent prices, as it was both large and exceptionally clean this year. Little if any will be dried, and the main variety on these Areas is the Trevatt.

Mr. A. G. Enticnap, Chairman of the board of directors of the Leeton Co-op. Cannery, stated at a recent meeting that the company would process the whole of the available crop of Apricots and Peaches this season in spite of the somewhat foreboding statements issued recently that the British Government would not be able to purchase the bulk of the crop owing to transport facilities being curtailed for necessities.

Melons and Tomatoes will, however, be curtailed to certain contracts. Since Mr. Williams took over the general management of this company, the progress has been both sure and satisfactory, and the last balance sheet disclosed a most satisfactory position for the shareholders. For the year ending September 30, 1940, a net profit of £10,425/9/1 was shown, after providing for a sum of £3,962/7/1 depreciation, and paying a total interest bill of £10,955/12/2.

These figures shown under the somewhat adverse conditions of trading speak highly for the able management the company now has.

A few early Peaches are being marketed for fresh fruit, but the bulk of Peaches are canning varieties and these are showing excellent crops. Elbertas and Blackburn Peaches are also developing well, and high-grade fruit will be marketed if good weather conditions prevail.

The Irrigation Research Extension School commenced its sessions on November 25 and lasted until November 29.

Mr. Eric S. West, M.Sc., Officer in Charge of the Research Station at Griffith, extended a cordial welcome.

Mr. C. G. Savage, Chief of the Horticultural Division, Department of Agriculture, occupied the chair for the first two days, and afterwards the meeting was

under the direction of Mr. F. K. Watson, of the Water Conservation and Irrigation Commission.

Instructive addresses were delivered by the various officers of the Research Council.

Mr. J. K. Taylor, Senior Soil Surveyor of the C.S.I.R., gave a most interesting lecture on the soils of the Areas.

Professor J. A. Prescott, Chief of the Division of Soils and Director of the Waite Institute, Adelaide, was also present throughout the proceedings, and his discussions on the various addresses on the closing morning of the School, and his summing up of the details, was a masterly discourse.

A well-attended public meeting was held in Griffith to protest against the Government proposal to utilise the waters of the Snowy River for a large hydro-electric scheme.

Major Reid, Minister for Agriculture, stated that the matter was being fully investigated. He said: "At the present moment the Irrigation Commission has three teams of surveyors working in the Snowy River area on the proposal to divert the Snowy River into the Murrumbidgee, and I believe that when the survey is completed the Commission will be in a position to place before the Government a case which must be favorably considered."

An interesting Field Day was held at the farm of Mr. E. O. Ebert, at Ballingall, on November 22, by the C.S. & I.R. Research Station of Hanwood, the arrangement for this demonstration having been made by the Griffith Producers Co-op. Coy., who realise the great importance of giving the growers the practical demonstration of the work being conducted on various farms by officers of the C.S. & I.R.

The main theme for discussion and observation for the day was the system of contour watering in this orchard, a somewhat new departure in irrigation practice which has been used with success on some of the stiffer soil orchards, where the penetration of the water has not been sufficient under ordinary "furrow" application.

On portions of this farm, cover crops of Subterranean Clover had been sown, and a wonderful sward of luscious green growth was the result.

Addresses were delivered prior to the inspection of the

irrigation plots, by Messrs. E. S. West, R. R. Pennefather, and Mr. H. Mallaby, and Mr. O. E. Ebert also gave a very interesting account of his treatment of his particular soil by various methods. Since the application of water by means of the "contour" flooding, the crops had materially increased and improved in quality, and for the past two years he had used the present method under the direction and advice of the Research Officers concerned.

Check banks were made with a V shaped type cultivator followed by a crowder, and the contours had easily been ascertained from the aerial photograph taken of the farm during the survey of all farms by means of this aeroplane photography.

The value of the aerial survey has been fully manifested by the numerous details revealed by the photographs, which although taken from a height of 5,000 feet, reveal every sick tree and also other faults on the farms, re-

sulting from flooding and other causes, and these photographs, when compared with the survey contour maps of the various farms, give a very great assistance to anyone who contemplates laying out contour banks or re-grading of their holdings.

Mr. Pennefather, in his address on the methods adopted by Mr. Ebert, stressed the fact that this type of irrigation would not be suitable for all types of soil, but only on the heavier types of Bilbul loam.

A most interesting afternoon was spent by all those who attended, and the value of such instruction in the full practical manner shown, was expressed by Mr. D. Stark in passing a vote of thanks to the organisers of the day's operations, to Mr. Ebert, and to the Officers of the Research Station, at the conclusion of the proceedings.

It is hoped to arrange further practical demonstrations of this type.

Crop Reports

MEDIUM CROP OF APPLES AND PEARS.
RAINS BENEFIT CROPS.

APPLE AND PEAR crop prospects as at December 6 are set out in a comprehensive report from Mr. A. A. Watson, Chief of the Marketing Division, N.S.W. Department of Agriculture.

In inland districts (where the main pome fruit producing areas of the State are situated) crops vary. Many are expected to yield very well, whilst others are medium to light. Some are patchy and poor. Late frosts were responsible for damage in some districts and hail injury was severe in a number of orchards.

Crops in coastal areas are mostly medium to light, although satisfactory sizing should take place as a result of recent rains. Early varieties are developing well and a number of reports disclose that some of the fruit should be ready for marketing at an early date.

Dry and unfavorable weather prevailed for some time until the position was relieved by beneficial rains which occurred at the close of November and during the first few days of December. Generally crops appear to have withstood the adverse conditions previously prevailing fairly satisfactorily, and recent rains are expected to enhance prospects, particularly should good follow-up rains be received.

A summary is as follows:—
Albury. — Apples: Around Lavington some varieties, notably Dunn's and McIntosh Red, have set heavily; Romes and Delicious have failed in many orchards, and Granny and Jonathan vary considerably. Moth is prevalent as heavy winds

made spraying difficult. Pears: Williams and Packhams have set well; other varieties lightly.

Batlow. — Apples: Granny, Jon., Yates and Democrat have good prospects; Del. only fair. Pears: Packhams, Williams, Winter Cole and Bosc, good.

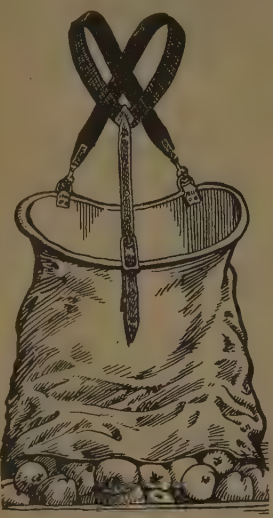
Bathurst, Blue Mountains. — Apples: Granny and Jon. carrying the best crops; Del., Grav., and Demo heavy; Romes and Williams Fav. fair. Pears: Ilford locality, Pears damaged by hail. Around Newbridge, Nelis and Howells good; Williams, Bosc and Winter Cole satisfactory. Kieffer and B. de Cap. being reworked. Perthville district, Williams and Packham's fair.

Orange. — Apples: Generally speaking, Granny, Del., Jon., Romes, and Londons are well cropped. Pears: Williams and Packham's show medium crops; Bosc and B. de Cap. only fair; others poor.

Goulburn, Mittagong. — Apples: Crookwell suffered severely from hail damage. Boorowa suffered from severe frost; Romes and Londons are the only two kinds showing much fruit. In Yass, Grannies suffered much shedding. Romes, Jon. and Del. are well cropped. Crops generally good at Mittagong. Pears: Crops good to heavy.

Young. — Apples: Fruit is sizing up well following the December rains and crops may be better than at first anticipated. Pears: Good rains have benefited crops. Packhams, Jos. and Bosc fair to light; Winter Cole and Kieffers fair; Williams moderate to good.

(Continued on page 14.)



"BAY VIEW" Picking Bag

For Apples and Citrus Fruits

Allows use of both hands. No bruising of fruit. Weight carried on shoulders, instead of back of neck. Full way opening for discharge. No hooks to injure trees.

MR. C. L. AVERY, CYGNET, TASMANIA, WRITES:—
"I have used "Bay View" Fruit Picking Bags for many years, have bought others, some much dearer, but I always come back to the "Bay View." I find them good for 10,000 cases per bag, save 1/3 for every 1,000 cases."

PRICES:	
"Bay View" Bag, web straps	12/-
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Do. leather bound, leather straps	20/-
Postage—	1 Bag. 2 Bags.
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You ought to read these six booklets

THE A.M.P. Society has prepared six folders and booklets for those young men and women who want to get ahead financially; who want to strengthen themselves so that they and their families may be prosperous and secure.

These six folders are named in the coupon below. Put a cross against those you wish to read (we suggest that you put a cross against all six) and send the coupon to the nearest A.M.P. office. Reading the folders may give you a new outlook on life and its opportunities. You could not spend a twopenny stamp in a more fruitful way. Send the coupon to-day.

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N.S.W. CROP PROSPECTS.

(Continued from page 13.)

Northern Tableland.—Apples and Pears: Good prospects generally.

Murrumbidgee Irrigation Area. — Apples: Some very heavy crops; prospects generally good. Pears: Fruit is clean and of satisfactory quality. Provided winds do not cause heavy shedding, fair crops, chiefly for canning purposes, should be marketed.

Parramatta - Camden. — Apples: Following the December rains, crop prospects are materially improved. In the Lakesland area, crops, with the exception of McIntosh Red, are light. Pears: In the Oakdale centre, Williams constitute the only variety of consequence. Crops practically a failure in Wedderburn district. Lakesland, good crops of Bosc, B. de Cap. and Clapp's Favorite; Williams light. The fruit is clean and sound.

Windsor. — Apples: Dry weather caused a check but recent rains will prove beneficial. Crops sizing up well, but are not heavy. Pears: Good-sized satisfactory fruit is developing.

Richmond - Kurrajong. — Apples: Jon., Fanny and Granny fair to medium crops; Del. poor. At this stage, fruit is very free from Black Spot; Codling Moth troublesome. Pears: Williams, Packhams, and Kieffers light; later varieties fair to medium.

Hawkesbury - Brooklyn. — Apples: Heavy winds have caused some damage. Average crops are in sight. Pears: Poor.

Hills District.—Apples: All fruit growing well and shows promise of good crops.

Young Farmer's Clubs

Victoria:

Reports from many sources confirm that the work amongst Young Farmers' Clubs is going ahead enthusiastically. Linton now has 30 members, vegetables and poultry are at present the chief activities. A quarter acre plot has been prepared for potatoes at Snake Valley School, and marrows and pumpkins will be planted later by the 40 members. Flower gardens are planted at Emerald and a pruning demonstration was one of last months' activities. Berry fruit and vegetables are being grown. Donations to the Children's Hospital and to war funds were recently made, a field day is planned for November 9.

At Narre Warren North vegetables are being grown as well as pasture plots and a poultry project. Two acres of land at Cora Lynn have been sown with grass for a playing field. Handicrafts by both boys and girls are reported popular at Bradvale. Similarly satisfactory reports come from Beaumaris, Clayton, Mornington, Lyndhurst and Lysterfield.

Echuca Club spreads its interests to poultry, vegetables and flowers. Here regular talks by the children are well delivered and cover outdoor and domestic science subjects. Civic management, irrigation, pig breeding and cooking are only a few of the subjects studied.

Pasture plots are becoming more and more part of Young Farmers' activities in pastoral districts and many good plots are seen although they have suffered from lack of rain. Wheat growing without fertiliser, sheep and cattle management, milk production and testing are the main subjects in northern districts.

A feature of most clubs that is to be commended is that sale of products of the clubs are being made commercially and the proceeds devoted to patriotic funds of all sorts. In this way the children are actually creating their own source of contributions and are very keen about it.

QUEENSLAND DEPARTMENT HELPS GROWERS.

Many Investigations in Hand.

The 1939-40 annual report of the Queensland Department of Agriculture records much service to primary producers. This covers investigations and chemical analysis of seeds, fertilisers, veterinary medicines, pest destroyers and stock foods from overseas as well as soil analysis, grasses and shrubs, cultural methods and feed values. Many thousands of samples submitted by farmers and merchants were analysed and reported upon by the Agricultural Chemist.

LEVY ON PINEAPPLES.

Organisation and Publicity.

In Queensland a regulation has just been issued making a levy on all Pineapples marketed during the ensuing twelve months. The money will be used for organisation and advertising in the interests of Pineapple growers.

For several years the levy was 1d. per case for Smoothleaf, Rough and Ripley: this has been raised to 2d. per case on Smoothleaf only.

SOUTH AUSTRALIAN DRIED FRUITS BOARD.

The last meeting for 1940, held on December 18, cleared up many matters of business, providing for a good start for 1941. Board elections resulted in the following candidates being returned:—No. 1, Messrs. C. W. Till and J. R. Jemison; No. 2 (non-irrigated areas): Mr. C. E. Russell, unopposed.

Renewed registrations were granted to 35 packing houses and 12 dealers for 1941. An officer of the Department of Commerce to supervise grading at Coonawarra for 1941 was requested. Occasion was taken to make a presentation to Mr. J. B. Murdoch upon his voluntary retirement as a Board member.

California Cling Peach growers delivered 292,000 tons of fruit to canneries and received £1,960,000 for it last season.



South Australian News and Notes



INCLUDING OFFICIAL NOTES AND REPORTS FROM THE SOUTH AUSTRALIAN FRUITGROWERS' & MARKET GARDENERS' ASSOCIATION.

S.A. Fruitgrowers and Market Gardeners' Association Incorp.

MEETING OF EXECUTIVE COMMITTEE.

THE Executive Committee of the S.A. Fruitgrowers and Market Gardeners' Association Incorp. met in the Board Room, 288a Rundle-street, Adelaide, on December 20, 1940, at 10.30 a.m. The President (Mr. H. N. Wicks) presided over the meeting attended by:—Messrs. C. J. Pitt, H. B. Robson, C. H. Ragless, H. Schultz, G. H. Schultz, L. B. Pfeiffer, H. W. Parsons, G. Jennings, L. G. Pet-hick, M. G. Hannaford, J. B. Randell, W. Wye, C. Ridley, E. L. Giles, A. O. Petersen, A. G. Strickland.

Apologies: Messrs. C. Stanford, M. Packer, G. T. Pitt, W. H. Ind, R. A. Cramond, F. A. Wicks, N. Edwards, C. W. Giles, J. Turner and M. J. Vickers.

Minutes of November meeting read and confirmed.

Hardwood Boxes: The matter of an unsatisfactory hardwood bushel case, deferred from last meeting was further discussed. Mr. A. G. Strickland submitted samples of the case in question.

Mr. J. B. Randell moved: "That the Association considers it desirable to instruct the Chief Horticulturist to have a regulation introduced providing for a maximum space of $\frac{3}{4}$ in. between side boards."

Seconded Mr. G. H. Schultz. Carried.

Correspondence: Letter received from Chairman of Tomato Section advising a grant of £35 from the Section to Association Funds.

The President advised that the Celery Section had also made a grant of £100.

Mr. J. B. Randell moved: "That the Sections be thanked for their co-operation in this matter." Seconded Mr. E. L. Giles. Carried.

Department of Agriculture: Letter received from Department of Agriculture advising of a proclamation published in Tasmania recently in relation to caterpillars and white butterflies in cabbages, cauliflowers, etc. Statements of codling moth records were also received.

Sugar Concession Committee: Circular received from the Fruit Industry Sugar Concession Committee setting out the minimum prices prescribed for the 1941 Fruit Processing Season.

Central Branch: Mr. A. O. Petersen reported that there was a balance of £31 standing to the credit of the Central Branch in the Savings Bank, and as members of this Branch had now been absorbed into other sections he moved: "That the account be closed, and the money in hand be paid into Association funds, the amount in question to cover the £50 loaned to the Association in 1935." Seconded Mr. G. Jennings. Carried.

Droppers in Markets: Resolved that the Wholesale Fruit Merchants' Association be further contacted re the operation of "droppers" in the market lanes.

Cases: Mr. E. L. Giles reported on the position that had arisen concerning cases and containers.

Sectional Reports.

Soft Fruit Section: The new Chairman of the Section, Mr. L. G. Pethick was welcomed, and reported that at present the market for soft fruits was good, and endeavors were being made to overcome the small fruit position.

Citrus Section: Mr. L. J. Wicks reported that despite a record crop, an excellent disposal had been effected. Over the past month there had been a tremendous influx of Valencias on the local markets.

Cherry Section: Mr. W. J. Bishop reported that the Cherry Season was drawing to a close. The season had been a peculiar one.

Apple and Pear Section: The President reported that nothing had yet been finalised as regards S.A.'s request for an advance

equal to that obtainable in Victoria. The Premier was calling a conference on the matter for Monday, December 23.

Trading Society: Mr. W. J. Bishop reported that a satisfactory turnover was being maintained.

Marion Branch: Mr. H. W. Parsons reported that the last meeting had been of a special nature, and was attended by an exceptionally large crowd. During the evening, Mr. F. H. Edwards unveiled an Honor Board containing the names of past Presidents. Mr. W. J. Bishop stated that he had attended the meeting in company with Mr. L. J. Wicks and Mr. F. Hughes, and he had been asked by the Branch Chairman (Mr. H. N. Western) to convey to the Executive, assurances of the Branch's loyalty to the Central Association.

Onkaparinga Branch: Mr. L. B. Pfeiffer reported that late planting had been delayed owing to seasonal conditions, but an excellent rain during the week would assist growers.

Torrens Valley School Exhibition: Mr. G. Jennings reported that he had attended an afternoon at the Clarendon School on December 17, to present the Association Cup for Apple packing, and the Jennings' Shield.

The meeting concluded by the President extending to all the Season's Compliments.

Annual Meeting of Apple and Pear Section.

THE Annual General Meeting of the Apple and Pear Section of S.A. Fruitgrowers' and Market Gardeners' Association Inc. was held on December 6, 1940, at 10.30 a.m.

The meeting was well attended, and presided over by Mr. M. J. Vickers (Chairman of the Section).

Election of officers for the 1941 season resulted as follows:—

Chairman: Mr. M. J. Vickers.

Committee: Messrs. D. W. Hannaford, J. Turner, H. N. Wicks, A. D. Chapman, T. Playford, J. B. Randell, W. G. McLaren, F. F. Redden, A. O. Petersen, W. J. Bishop, S. M. James, G. Clifton and R. Hannaford.

Delegates to Executive: Messrs. J. B. Randell, G. Clifton, S. M. James, H. N. Wicks, R. Hannaford, W. G. McLaren, M. G. O. Basey and M. Hannaford.

The need for complete organisation of the industry was urged, and steps for the uniting of the industry were taken. Growers also voiced their opposition to the treatment meted out to South Australia as regards advances during the 1941 Acquisition, and it was resolved to give unqualified support to the Premier in his efforts to obtain advances equal to those to be paid to Victorian growers.

The need for a State Growers' Committee to advise the State Apple and Pear Acquisition Committee on matters pertaining to harvesting, storage, etc., was also stressed, and it was resolved that the State Acquisition Committee be approached with the view of setting up such a Committee.

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Association Employee for the R.A.A.F.

On December 20, members of the Committee of Management and the staff of Fruitgrowers' and Market Gardeners' Association, met to bid farewell to Mr. W. H. Field, a member of the staff who has received his call for training as a pilot in the R.A.A.F.

The various speakers referred to many qualities of Mr. Field, and wished him God speed and expressed the hope of his early and safe return.

The Chairman of the Board (Mr. W. J. Bishop) presented Mr. Field with a shaving and utility set.

In responding, Mr. Field thanked all for their kindly expressions and expressed his appreciation of the many courtesies afforded him during his Association with the firm.

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THE SOUTH AUSTRALIAN FRUIT MARKETING ASSOCIATION INCORPORATED

Growers' Sub-Committee

MINUTES of monthly meeting held at Adelaide on December 20, 1940.

Present: Messrs. R. G. Hannaford, R. Fowler, D. W. Hannaford, S. M. James, M. G. Basey, R. O. Knappstein, A. G. Strickland, J. B. Randell, H. N. Wicks, C. L. Winser, A. Brealey, and the Secretary.

An apology was received from Mr. M. J. Vickers.

Mr. M. G. Basey was unanimously re-appointed as Chairman of the Sub-Committee for the ensuing year.

April Meeting.

Mr. Basey stated that Mr. A. G. Strickland would give a talk on the subject of "Primary Asco Spores." This State seemed to be getting a late infestation of "Black Spot" and growers needed all the information that could be obtained to assist in controlling the pest.

A short general discussion took place on the question of

closer co-operation with the S.A. Fruitgrowers' and Market Gardeners' Association and the desirability of having one central body to represent the industry.

Address by Mr. R. Fowler.

Mr. R. Fowler, Manager, Government Experimental Orchard, Blackwood, gave an interesting paper on some causes of fruit not setting.

He made reference to experimental work being carried out in many directions and stated that lack of nutrition was probably one of the primary reasons of non-setting of fruit, but there were many contributory reasons and a number of problems to be solved in this connection.

At the conclusion of the paper a discussion took place and members gave instances of fruit dropping, but it was very difficult to discover any reason therefor.

Executive Committee

MINUTES of monthly meeting held at Adelaide on December 20, 1940.

Present: Messrs. R. G. Hannaford, R. Fowler, D. W. Hannaford, S. M. James, M. G. Basey, R. O. Knappstein, A. G. Strickland, J. B. Randell, H. N. Wicks, C. L. Winser, A. Brealey, P. R. B. Searcy, and the Secretary.

Apologies were received from Messrs. M. J. Vickers, G. A. W. Pope, J. H. Dunning.

The President, Mr. J. B. Randell, occupied the chair.

Correspondence.

Letter dated December 3, from S.A. Apple and Pear Acquisition Committee enclosing schedule covering varieties, qualifying sizes and rates of advance in connection with the 1940-1941 crop.

Letter dated November 20, from Mr. M. J. Vickers, acknowledging receipt of the Association's letter conveying expression of appreciation of the work done at the Canberra Conference.

Letter dated December 4, from the Assistant Minister for Commerce, acknowledging receipt of the Association's letter dated November 28, asking that the term "prescribed quality" should be defined as soon as possible.

Letters from the Department of Agriculture, dated:—

November 28, enclosing copy of statement re fruit crop prospects for the coming season.

November 22, re hardwood boxes for Oranges. A type of hardwood box was inspected at the meeting and members agreed the box was a very unsatisfactory one and it was resolved to recommend:—

"That the maximum intervening space between sideboards should be not more than $\frac{3}{4}$ of an inch and that boxes should be of seasoned timber."

Conference With Federal Members.

The Secretary advised receipt of a message from the Secretary to the Premier asking that 4 or 5 representatives from this Association should meet at the Pre-

THE SOUTH AUSTRALIAN FRUIT MARKETING ASSOCIATION INC.

January Meetings.

The January meeting of the Association will be held at the Secretary's office, 83-4 Brookman Buildings, Grenfell-street, Adelaide, on Friday, January 31, 1941.

Growers' Sub-Committee commencing at 1.45 p.m. Speaker, Mr. S. M. James. Subject: "Science as an Aid to the Fruitgrower."

Executive Committee Meeting will commence at 2.45 p.m.

E. WHITFIELD MILLS, Secretary.

mier's office on December 23 to meet Federal Members and put before them the Association's views in regard to the Apple and Pear Scheme, particularly in regard to differential payments between Victoria and South Australia.

It was resolved to ask the Growers' Panel recently submitted to the Minister to attend.

He expressed appreciation of the reports of meetings which had appeared in the "Fruit World" since we had stopped sending copies of minutes to members of the Executive Committee.

S.A. Fruitgrowers' and Market Gardeners' Association.

A general discussion took place on the question of closer co-operation between this Association and the S.A. Fruitgrowers' and Market Gardeners' Association and on the motion of Mr. M. G. Basey, seconded by Mr. P. R. B. Searcy a resolution was carried:—

"That this Association is of the opinion that co-operation with the S.A. Fruitgrowers' and Market Gardeners' Association is desirable, and we are prepared to use every means to bring it about."

Military Duties.

In view of the extended call up of single men the Secretary was instructed to write the Premier and ask if he would approach the Military Authorities and ask that they should assist the fruit-growing industry by allowing men connected therewith to attend camp from April onwards after the fruit harvesting has finished.

Trade With the East.

Mr. Searcy advised that Mr. J. H. Dunning was in Melbourne attending a meeting of the Apple and Pear Board as the State representative in connection with Eastern Trade, and he suggested that as this was a matter of importance to the industry generally that the expenses of the trip should be met by the Association.

Christmas Greetings.

The President extended to members the compliments of the season and he hoped that by the end of next year we would be in a better and happier position than to-day.



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CHILEAN NITRATE

Some Observations on Fruit Growing in the United States of America

(By A. G. Strickland, M.Ag.Sc., Chief Horticulturist, in the South Australian "Journal of Agriculture.")

THE American fruitgrowing industry, like that of Australia, has developed mainly upon the foundation stocks of fruiting plants introduced from Europe and other parts of the world during the very early days of colonisation. Apples, Pears, Plums, and other deciduous fruits were taken to Eastern United States in the early seventeenth century, and Oranges are said to have been introduced into Florida by the Spaniards in 1560. The important Californian section of the industry commenced with plantings of Oranges, Figs, Olives, Grapes and a number of other fruits made at numerous Franciscan missions during the late eighteenth century. However, the first real impetus to Californian Orange production was the introduction of the Navel Orange from Brazil in 1873.

To-day, fruitgrowing is an industry of considerable size and importance in America, the average production of all fruits on a fresh weight basis amounting to over 13 million tons per annum. This figure of 13 million tons includes, of course, fruit which is canned, dried, made into juice or wine, or processed in other ways. The two major fruits, Apples and citrus fruits, are produced in approximately equal quantities, and aggregate between them considerably more than half the total production. The large scale of American fruitgrowing may, perhaps, be realised from the fact that almost one-third of the world production of Apples is grown in that country.

What happens to these enormous quantities of fruit? In the first place, quite a big slice of the production is attended to by the American public—a public which is definitely fruit minded. On average, the American citizen consumes in a year 57 lb. of Apples, and 53 lb. of citrus, as well as varying quantities of other fruits; he may drink these fruits in the form of juice, and they may sometimes come to him in a can; nevertheless he gets value for his money, and the fruitgrower gets money to help meet his costs of production. The apparent consumption of fruit in Australia does not compare favorably—about 30 lb. of Apples per individual each year, and about the same quantity of Oranges as against 50 lb. to 60 lb. of each of these fruits in America. Australian consumption figures need to increase; with growing production of various fruit by-products—particularly of canned and bottled fresh fruit juices—with the education

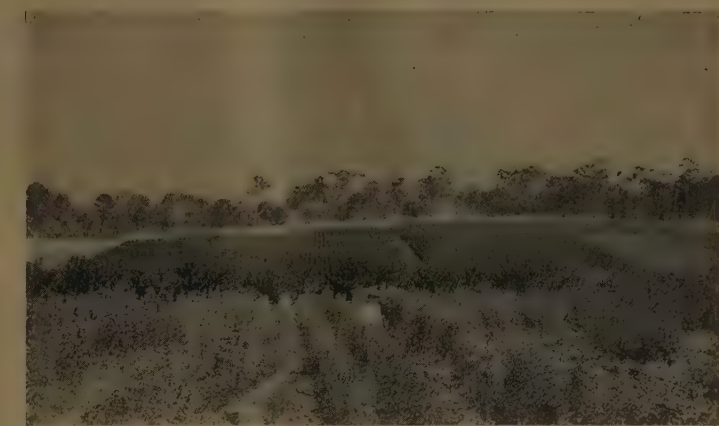
of the general public as to the health giving properties of fruit, and fruit juices, and with improved grading and packing we can, and will, considerably improve our present figures.

Compared with the quantities marketed at home, American fruit exports do not appear at all imposing. Nevertheless, during recent years, fruit exports from United States have maintained third rank among all agricultural exports, being exceeded in importance only by cotton and tobacco. In one form or another—fresh, dried, or canned—American fruit has found a market in most countries throughout the world; particularly in the case of fresh fruit, the quality and packaging has set a very high standard for competitors. European countries—especially United Kingdom and to a lesser extent, Scandinavia, the Netherlands, and France—were important markets for United States fruit exports. Since the outbreak of war in September, 1939, these markets have virtually vanished, and to a large extent the American fruitgrower is facing the same difficulties as the Australian grower.

Even before the war various sections of the American fruit industry also had their problems of over-production—problems which the administration has endeavoured to overcome by marketing agreements and surplus removal programmes.

Although such programmes are sponsored by the Federal Government their initiation is largely the responsibility of the particular section of the industry concerned, and no programme is put into operation unless approved by a two-thirds majority of the growers affected. The marketing programmes are administered by committees of growers and handlers who, through regulatory measures, arrange the orderly marketing of the produce in an endeavour to stabilise market and price.

In co-ordination with such marketing schemes, the Federal authorities make funds available for the operation of surplus removal programmes, whereby burdensome surpluses of fruit or vegetables are removed from ordinary marketing channels, and made available to low income, needy families who otherwise would not be able to purchase such commodities. Among the foodstuffs so purchased by the Government in 1938, were dried stone fruits, dried Apples, Raisins, fresh Apples, fresh Grapefruit, and fresh Grapefruit



Yearling Apple trees in foreground, with ten-acre block of nursery in background.

(Illus. courtesy L. J. Wicks, Highbury East, S.A.)

juice; these products were made available for relief distribution. During 1939 under the direct purchase and distribution system, about 2 billion pounds of foodstuffs were distributed to an average of nearly 3 million families each month. The foodstuffs included dairy and poultry products, flour, and various fruits and vegetables.

While the primary purpose of the marketing and surplus removal programmes is to assist producers in the orderly marketing of their crops, and to remove price depressing surpluses, the interests of consumers are given full consideration, and no attempt is made to raise prices above levels yielding fair returns to producers.

The cultivation of various types of fruit is spread throughout United States, although concentrated according to the kind of fruit in certain areas possessing favorable natural conditions. Apples and Pears are chiefly grown in the eastern States north and south of New York, in Michigan near the Great Lakes, and in the north-western States of Oregon, Washington, and California—in the last three States generally under irrigation. Pear growing is most important in the Pacific States—chiefly California. Grapes are found in the Great Lakes area, but mainly in California. Citrus fruits are concentrated in California, Florida, and southern Texas.

In the eastern areas, Apples are packed chiefly in barrels, whereas the western States pack in boxes almost identical with those used in Australia for export Apple packing. Trees are large, and generally on seedling stocks, although considerable work is now being carried out on vegetatively propagated stocks. Most Apple growers in United States have never heard of the Northern Spy stock, so commonly used for Apples in Australia. Many observers consider this is a matter for congratulation—that is, congratulation of the American. On average, Apple yields are very much higher than in Australia.

As in this country, codling moth is one of the most trouble-

some pests of the Apple and Pear, and particularly in the western areas of production very heavy spraying programmes are necessary. In most districts, the spray residue on harvested fruit necessitates elaborate washing equipment for cleaning of fruit prior to packing. In some packing houses, waxing plants have been installed whereby, after washing, the fruit receives an artificial coating of wax to replace that lost in the washing process.

Late infestation of Pears with codling moth—just before harvesting for shipment to eastern United States or overseas—has occasioned much trouble for Californian shippers. The difficulty has been overcome by the introduction last year of fumigation of packed Pears just prior to shipment, using a newly developed fumigant—methyl bromide.

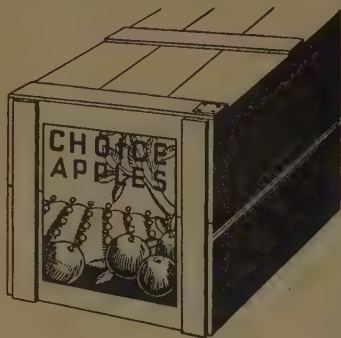
In many parts of United States, Apple and Pear growers are seriously troubled by fire blight—a bacterial disease which fortunately does not occur in Australia. Huge sums are annually expended in pruning out fire blight infections—practically, the only control method where the disease has gained a hold.

Particularly in western States, black end of Pears is a frequent source of loss. This disease is associated with certain Japanese root stocks, widely used in some American areas. It does occur in Australia, but as we have not used Japanese stocks to any extent, it is usually of minor importance.

In the packing of their fruit, the Americans have attained high efficiency. Most fruit is packed in central packing houses—many of them being co-operative organisations. Frequently, a number of packing houses are affiliated, and market all their fruit under one label. Such a label is the famous "Blue Goose" known throughout America and in many overseas countries.

The citrus industry in California is highly organised through the

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California Fruit Growers' Exchange, better known to Australians perhaps as the Sunkist organisation. This voluntary marketing body has done a remarkable job in holding the citrus industry together through a most difficult period.

In the period 1925 to 1929—a period of prosperity and high buying power—citrus production in United States averaged 55 million boxes per annum. Since then, production has steadily grown, and in 1938-39, the harvested crop was 135 million boxes, due largely to increased production in Florida and Texas. For some years past, many citrus growers in America have not made their cost of production. However, over-production and consequent low prices are not the only handicaps of the American citrus industry. Although variable from district to district, pests and diseases are legion, and expenditure on their control is a large item. Then, in California, destructive freezes or frosts are common, and most growers must make provision for heating their citrus groves. Oil-burning heaters are used for this purpose—fortunately, oil is cheap in California—and more recent types of heater are very efficient and entirely smokeless in operation.

Another serious disadvantage is distance from market. California and Arizona are more

than 2,500 miles from the chief citrus markets, and this means that more than one-quarter of the retail price of Oranges represents transport and refrigeration costs. In South Australia at least, the citrus producer is very fortunately placed as compared with the American grower.

Climatically, the citrus regions of California resemble the Murray Valley districts of South Australia, and in view of this, it is noteworthy that irrigations are applied to citrus more frequently in California than in Australia—this despite the generally better water holding capacity of the Californian soils. Mostly, the cultural operations in Californian citrus groves are similar to those in our Murray Valley—in both, the importance of nitrogenous fertilisers and of maintaining soil organic matter are fairly generally recognised. In regard to pruning of Orange trees, it did seem that where this operation is systematically carried out in South Australia, better results have been obtained in the development of inside fruiting wood. This, however, may be a reflection of the difficult period through which the Californian citrus industry is pass-

ing; in many groves expenditure has been drastically reduced and seemingly less important operations, such as pruning, have been somewhat neglected.

In preparing fruit for market, the citrus industry is most efficient, and centralised packing is even more general than with other types of fruit. Mostly, the grower is not concerned with the harvesting of his fruit, picking gangs being maintained by the central packing organisations. In the packing houses, the fruit is washed, waxed, graded, and packed with most up-to-date machinery.

No effort is spared to dress the fruit in an attractive manner; no new process devised for improving the keeping quality or appearance of the finally packed fruit remains untried.

This attitude is, in fact, generally typical of most sections of the fruit industry in United States. The disaster of the glutted market is well known to the American grower, but he also knows that quality fruit and quality packing are more than ever essential in times of over supply. He knows that he can never relax his efforts to please the consumer.

DISEASES REPORTED TO HAVE ATTACKED GHERKIN PLANTS IN SOUTH AUSTRALIA

(Continued from November issue)

Powdery Mildew: Powdery mildew is probably the most common fungus disease attacking gherkin plants. The disease first appears on the foliage and young stems of the plant as a white powdery growth. During this stage, the underlying tissue appears to be comparatively normal, but finally, the spots turn brown and dry. In cases of severe attack, the leaves may be killed. When all the foliage of the vine is attacked, the plant is considerably weakened, has a yellowish color, and much of the fruit must be discarded as culls.

The disease is most troublesome during the early and latter part of the season.

Control: When the runners of the young plants are approximately 12in. long, the whole of the plant and particularly the heart, should be dusted with a dusting sulphur. If this first treatment is applied early enough, it is quite possible that no subsequent treatment for powdery mildew will be required, as the infection that may occur at the latter end of the season will, in all probability, be too late to seriously affect the crop yield.

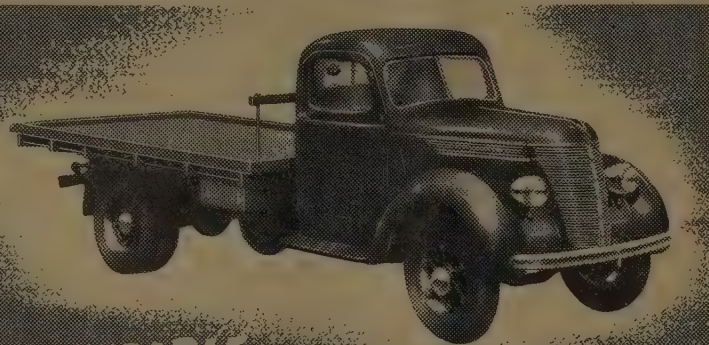
Root Knot: Root knot, also known as eelworm, is a root disorder, and is very widely distributed. The root tissue infested with eelworms is stimulated to abnormal growth, so that the invaded roots become two or three times as large in diameter as their normal size; in the final stages infested roots decay. Affected plants may linger through the season, or die prematurely. The pest may be distributed by

running water or in soil from infested properties adhering to roots of seedlings or implements. The planting of summer crops in soil that is known to be infested with eelworm is not deemed a sound agricultural practice. At present there is no economic method of controlling the pest when it infests widespread areas, the only course under such circumstance being to utilise the ground for crops that are not seriously affected.

Insect Pests: Gherkin plants are not subject in South Australia to the attack of many insect pests. Perhaps the most troublesome of insects are aphides, which may multiply on the plants during the growing period. Aphids may be controlled by spraying with nicotine sulphate, one part in 800 parts of water, or by dusting with a nicotine-carrying compound during the warm weather.

The red spider may prove to be troublesome during the growing period. These very minute pests cause the foliage to turn yellow when present in plague numbers, and thus greatly reduce the vitality of the plant.

Control: Dust all portions of the plant with dusting sulphur during warm weather. — (S.A. "Journal of Agriculture.")



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Dried Fruit News and Notes

N.S.W. Dried Fruits Board Half-Yearly Meeting

SEVERAL matters of interest were considered at the recent half-yearly meeting of the above Board, when Mr. G. J. Evatt occupied the chair and delegates from all districts attended.

Quotas: The revised quotas, recommended by the Consultative Committee, were approved and were (with previous quotas in brackets): — Currants, 17 per cent. (15.1), Sultanas 14.5 (14), Lexias 49 (45), Prunes 100 (100), Peaches 98 (95), Apricots 90 (90), Nectarines 100 (100), and Pears 85 (50).

Production: An all-time record of production in Australia for 1940 was reported. Dried vine fruits 97,765 tons, and dried tree fruits 4,789 tons, a total of 100,554 tons.

Inspections: The Secretary reported upon special inspections by Board officers and stated that illegal transactions within the State had practically disappeared. Only two infringements by grocers had been reported. In one case the fruit had been supplied by an Italian grower. Continued activity by Inspectors was advised. The many sides of the Inspector's work brings him in contact not only with grocers but with growers and officers at railway stations.

Publicity was arranged with the co-operation of large stores and window displays were given at low cost. Stores had also co-operated in the distribution of

dried fruits recipe books to selected customers. Good reception was reported of the new type of dried Pears in 10 lb. boxes.

Prune Juice: The Council for Scientific and Industrial Research will conduct further research into the manufacture of Prune juice and both methods of manufacture will be investigated. Prune interests agreed to erect suitable plant at Homebush for use of the C.S.I.R.

Prune Bread: Experiments were being conducted at the William Angliss Food Trades School, Melbourne, in the manufacture of Prune bread, and possibilities of its introduction to the public were quoted as favorable. The experiments are to be continued and it is hoped that a use will be found for small and discarded fruit.

Moisture Content: Observations upon this subject were presented and methods of ascertaining moisture content discussed. The Processing Committee is at present engaged upon this matter.

Notes for Growers: The compilation of an annual list of growers eligible to vote was discussed in relation to Section 6 of the Act and N.S.W. and Victorian Boards will keep the rolls up to date for use at election time every three years or in the event of a by-election.

Many other matters of general business rounded out a very successful meeting.

The Disposal of Vine Cuttings

Burning or Used for Humus

IN discussing the disposal of vine cuttings, Mr. E. Borroughs, of Ramco, told growers what he advises in the S.A. Journal of Agriculture recently.

One of the old methods of getting rid of the cuttings was to put them in heaps along the rows, and use an old square tank as an incinerator, which was drawn along between the rows by a horse, and a man on each side forked in the cuttings; all the ashes fell through a grating underneath to the ground. In this way all the manurial value of the ashes went on to the soil, but it was in such small quantities as not to be worth considering. Another way is to drag them to the end of the rows with some form of cutting rake and burn them on the headlands. This does not appeal to me; there are a variety of cutting rakes, which are all far from perfect, and one needs patience for this work.

Among later methods, where a cover crop is grown, the cuttings can be thrown in the cover crop and the lot chopped up with a rotary hoe, though if the cuttings are thrown in every row they are chopped up much better. The best method is that of putting the cuttings in a delver furrow, tractor made. The cuttings have to be chopped up a bit at times to go down in the furrow better, and, of course,

this slows up the pruning a little. There may not be a great deal of value in the prunings, apart from a certain amount of humus, but the delver furrow is preferable for other reasons. Stable manure can be put in it and left to rot, whereas if broadcast it is on the surface a lot of the time. Also any old lucerne or grass can be put in the furrow; all the leaves along the channel, which are such a source of annoyance at irrigation times, can also be put in and made profitable.

The ashes of burnt vine cuttings contain a certain amount of potash, which can be used for dipping purposes. Potash obtained from the ashes of vine cuttings and other woods was used in Greece for dipping purposes, and probably the idea was introduced by Greeks to Mildura a good many years ago, with a great deal of success. With the unsettled conditions caused through the war, it appears that, if at all possible, Sultanas will have to be dipped in potash or some substitute dip, as the keeping qualities will have to be kept up as much as possible against lengthy storage. However, the potash content of native woods is very low, vine cuttings are limited in quantity, and dealing with the potash content from the ashes is a rather slow job; it is not worth considering at present in the disposal of cuttings.

Report on Dying Vines

Experiments and Findings

A STUDY MADE of the trouble from dying vines in the Murray Valley is reported in the C.S.I.R. Journal for August, 1940. Losses average 2 to 5 vines per 20-acre holdings per annum. They occur more frequently on heavy than sandy soils and in or near depressions in which water lies after irrigation. The study suggests that water-logging or salinity may be predisposing factors.

Inoculation of several affected vines resulted in the vines regaining normal growth in the following year. Though injuries to the vines result from close cultivation with horse hoes, the report suggests that the loss from such injuries is not severe enough to necessitate tillage by hand at a garden labor cost. It suggests that replacement should be faced and such new vines are not more liable to premature death because of taking the place of the removed dead vines.

A summary of the report follows:—

1. A trouble known as "dying vines" annually causes the premature death of a small number of irrigated Grape vines in the Murray Valley.

2. In most cases, death apparently begins during the dormant period, and the trouble is first noticed when affected vines fail to produce new growth in the following Spring.

3. On splitting open the stem of an affected vine, a brown discolored area, with a characteristic sour odour, is found in the wood at the base of the stem. This usually appears to originate from a tillage injury.

4. An unidentified fungus was isolated from most of the affected vines examined. Healthy vines inoculated with this fungus made normal growth during the following two seasons.

5. It is thought probable that the trouble is primarily physiological.

6. Young vines planted where affected vines died make normal growth, and are apparently no more liable to premature death than are other vines in the same locality.

DRIED FRUITS MEET A NEED.

FIFTY YEARS AGO dried fruits were almost unobtainable, and early settlers and country travellers missed the versatility of dried fruits which the present-day traveller carries or obtains with ease. Raisins, Currants, Prunes, Figs, Peaches, Apricots and Apples are only some of the dried fruits now so common, and the dried fruits industry has assumed extensive commercial propositions as one of the great primary industries.

Though fresh fruits rightly have an appeal to the consumer, their appearance is short-lived but dried fruit can be kept without serious loss either in quan-

tity or nutritive value. They are easily transported and convenient for many uses. The process of drying fruit is now so technically perfect that, even if old, the fruit retains its palatable appeal and its culinary value. This is emphasised in war time and in desert countries where fresh fruit is unobtainable and transport and storing facilities are scarce. Dried fruits are the solution of many conditions outside of the normal. The natives of many countries include dried fruits in their food rations when making long journeys since they recognise their food value.

So we pay a tribute to the growers and processors of dried fruits for their definite contribution to mankind's comfort and food requirements.

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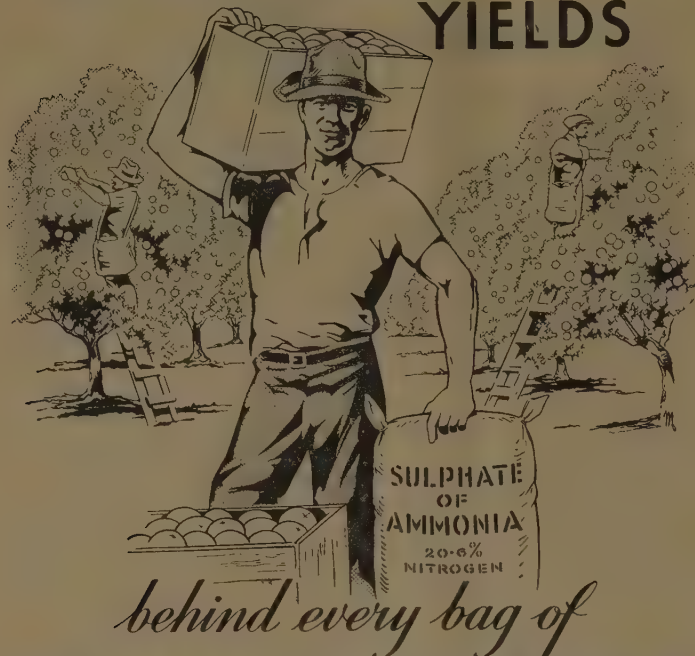
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H3B/38

FRUIT PICKING BAGS.

Save Labor and Damage.

The new "Bay View" fruit picking bag advertised in this issue by Mr. F. R. Mellor, of 452 Queen-street, Melbourne, is finding good reception, not only by Apple growers, but also by citrus growers as increasing orders and enquiries show. It is not only a labor saving device but prevents bruising of the fruit, allows the picker free use of both hands, is easily carried suspended by straps across the picker's shoulders, therefore is not hooked on the branches with a possibility of injuring the trees.

It packs in small compass when not in use and has a full bottom opening that gives quick delivery when the fruit is rolled into the case without injury. Mr. Mellor stresses that citrus growers are finding the Bay View very suitable for that class of fruit.

Growers will appreciate the fact that no sales tax is applicable to this bag and the prices quoted are nett. Also that although raw materials are becoming harder to get, and production costs and labor charges are rising, there will be no increase in the selling price unless something very unexpected develops, meantime orchardists are advised to order their requirements early. As illustrated in the advertisement, the steel hoop mouth obviates any struggling on the part of the picker and in some models is bound with leather, giving longer service. Enquiries should be addressed to Mr. Mellor at the above address.

THEY BELIEVED HIM.

"Then you deny that you were driving at an excessive speed when the accident occurred?"

"Most emphatically I deny it."
 "What proof have you?"

"I was on my way to the station to meet my mother-in-law!"

POTASH IN AUSTRALIA.

Valuable Find Reported.

A report released on October 12 says that valuable deposits of potash have been proved to exist in Western Australia. If the preliminary work of obtaining and treating the alumite is successful, a new and valuable war industry will become established. Already the West Australian Government, the C.S.I.R., and the Commonwealth Department of Supply are co-operating.

Prof. Noel Bayliss, of the University of Western Australia, and Dr. I. W. Wark, of the Industrial Chemistry Division C.S.I.R., will supervise the erection of the first plant at Lake Campron about 250 miles from Perth.

In view of the estimate that 2,000,000 tons of alumite are available and can be retrieved by dredging, and that Australia normally imports about 12,000 tons of potash salts annually, it will be seen how valuable the find has become. Germany supplied most of our requirements up till recent years, when the newly established chemical works on the Dead Sea began to supply moderate quantities. In six months ending December, 1939, Australia's imports of potash were valued at £28,313, and in the same period of 1938, £49,776. Fortunately, Australian merchants had laid in large stocks of potash before the war, and it is estimated that stocks on hand will meet requirements for about 12 months, by which time it is hoped that Lake Campron will be able to supply all of Australia's 280 tons per week demand. In addition to agricultural fertiliser, by-products from the field can be used for making explosives and match heads as well as various uses in pharmacy.

APPLE BY-PRODUCTS.

Very few persons are aware of the many different uses to which low-grade Apples may be put. In order to stimulate interest in this important branch of the Tasmanian industry, the Horticultural Division of the Department of Agriculture has staged most interesting and educative exhibits in the display windows of the Tasmanian Tourist Bureaux in Melbourne and Sydney.

Some of the products are already manufactured in Tasmania and are well known on the world's markets, besides these, samples have been obtained of recent additions manufactured in other countries.

The full list comprises—Solid Pack Canned Apples, Dried Apples, Champagne Cider, Pure Apple Juice, Apple Vinegar, Apple Jelly, Pectin, Stock Food, Aplets (a popular American confection), Apple Concentrate, Glace Apple.

Sixty-six million bushels of Sweet Potatoes were produced in U.S.A. in 1940, according to the U.S. Department of Agriculture, about 6 million bushels less than in 1939.

"LET US TO THE TASK, TO THE BATTLE AND THE TOIL"

—WINSTON CHURCHILL

These ringing words contain a New Year message of the utmost significance. Let us, for 1941, pledge our strength, our efforts, our money and determination to the attainment of Victory and lasting Peace

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TASMANIA

Fruit Crop Prospects

APPLES 4,000,000 BUSHELS; PEARS 270,000 BUSHELS —
APRICOTS, PEACHES, PLUMS AND CHERRIES GOOD.

THE COMMERCIAL APPLE CROP for 1941 in Tasmania is officially estimated at 4,000,000 bushels—20 per cent. under the normal yield. It is expected that the Pear crop will be about 270,000 bushels.

Details relative to the above and other Tasmanian fruit crops is set out in a report from the Minister for Agriculture (Mr. T. D'Alton) on information compiled by the Chief Horticulturist (Mr. P. H. Thomas).

Preliminary estimates based on returns furnished by the District Orchard Inspectors and a large number of commercial growers throughout the State have been compiled and a summary presented which indicates the general prospects at mid-December.

Apples:

Ideal conditions were experienced during the blossoming period and most varieties showed good settings considering the conditions experienced during last Summer and Autumn.

Weather conditions since October, though variable, have been generally warm, with opportune rains which have ensured normal crop development.

The early prospects have been considerably altered by late frost and unusually heavy hail storms in certain localities. Those chiefly affected by frost centre around the West Tamar and low level areas in the Cygnet, Huon and Derwent Valley districts. Hail occurred in isolated areas, being particularly severe in the Tasman Peninsula and Channel districts.

The general prospects at the present time indicate that the commercial Apple crop should approximate 4,000,000 bushels, which is 20 per cent. under the normal yield.

The condition of the main varieties are as follows:—Jonathan, Democrat, Delicious, Cleo, and Granny Smith are carrying normal crops in most districts.

Scarlet, French Crab, Worcester, Tasmans Pride and Crofton are reported medium to good, Scarlet being sometimes heavy.

Sturmer is good in the Derwent Valley and South Eastern districts, but in the North and Huon the prospects are for much lighter crops than usual. Cox's Orange Pippin and Alfriston are almost invariably reported as being a light setting in all districts.

Pears:

Light crops were experienced last season, and trees generally showed good prospects for this year, especially with the ideal conditions experienced at blossoming. Frost, however, has re-

duced the crops in a number of districts, with the result that the commercial yield should be below average. Under the circumstances the commercial crop will approximate 270,000 bushels.

The following details are given with respect to individual varieties:—

(1) Beurre Bosc are carrying generally good crops throughout the State, with Beurre Clairgeau and Williams good in many districts.

(2) Josephine, Glou Morceau, and Giblins are on the whole very fair.

(3) Winter Cole, Doyenne du Comice are patchy, whilst Winter Nelis is reported light.

Apricots:

Good crops of Apricots are recorded from almost all centres, but the ultimate crop harvested will depend on the rains during December, and dry weather during the ripening and harvesting period.

If conditions are favorable the crop should approximate 150,000 bushels.

Other Stone Fruits:

Plums blossomed very heavily in Spring and weather favored a heavy setting. In most areas the promise is good with many varieties above average. Some large districts were, however, affected by the early November frosts and the resultant drop was considerable. The outlook for this State as a whole is good.

Peaches also set well and except in frost-affected districts considerable thinning has been found necessary. South Eastern districts are particularly good, but in the Derwent Valley and inland, crops are light.

Cherries are generally satisfactory, the sweet varieties being particularly so. Kentish Cherries, however, which are mainly grown at higher altitudes, suffered severely from the early November frosts and gales.

Berry Fruits:

The frost, snow and wind already referred to caught Black Currants at a very bad time and it is probable that the crop has been reduced by more than half.

Raspberries and Loganberries fared somewhat better, but all early blossoms were severely hit and the reduction will be fully one-third.

Strawberries are somewhat variable but on the whole the injury will be less than anticipated, and the crop is now coming on well.

With all the berry fruits, reduced crops through frost injury will doubtless result in a higher individual size of berry, and the weight harvested will therefore be better than at first thought.



Pest control in Tasmania. Mobile spray pump at Geeveston in action.

FROST AND HAIL DAMAGE — CASE MATERIAL PROBLEM — BERRIES AND BIRD PESTS.

(By Our Correspondent.)

THE DAMAGE done by frost and hail in the Tamar Valley and the Lilydale district has proved to be quite as severe as at first estimated, many orchards being wiped out as far as high grade fruit is concerned.

The northern districts have had serviceable rains which have improved annual crops and grass considerably and the few orchards that escaped frost and hail will also benefit greatly.

The damage done in the southern districts is very severe in places and it is difficult to estimate the reduction in the total crop as some districts seem to have normal crops at the present time and there is little black spot showing.

Canary fly is showing out in places and will be troublesome later if not attended to. Red spider has not shown up yet, but aphids of all sorts have been more troublesome than usual on Apples, Peaches, Cherries and roses.

Case material is still a problem, and the price has advanced a penny since last year for local hardwood and in many instances the timber is not as suitable now that the best beds have been cut out.

Had there been a full crop this season the labor problem would have been acute, but with lighter crops it may be a little easier.

Strawberries, Raspberries and Loganberries are now ripening rapidly and picking is in full swing in the earlier districts.

The blackbird pest is ever increasing, and it will need concerted action on the part of the growers to keep them within reasonable bounds. Poisoning seems the most hopeful way and if adopted as a regular practice would achieve that end.

Local Cherries have been in the shops for some time and appear to be more popular than those imported from Adelaide or Melbourne, which are usually nice in appearance but astringent in flavor—I think they are picked too unripe (for transport reasons) and fail to develop their proper flavor.

The N.S.W. growers appear to be rather pleased with the 1941

acquisition scheme, which would suggest that they are getting more than they are justly entitled to.

The details were received without enthusiasm in Tasmania, the general opinion being that it was better than an open slather, but not what we might reasonably have expected.

I notice that the official estimate of Tasmania's crop for the 1941 is 4,000,000 bushels, which is probably pretty near the mark if we get normal weather conditions.

HENRY JONES' ANNUAL MEETING.

Future Problems.

In presenting the annual report of the Henry Jones Co-op. Ltd. (Tasmania), on December 16, Mr. A. W. Palfreyman, chairman of directors, stated that the coming year would begin with a lot of uncertainty since a large proportion of the company's business was overseas trade and the prospect of securing shipping space was doubtful. With a desire to assist growers, the company would work its plants to capacity at present, as growers had had the expense of cultivating their orchards, and if the fruit were not processed it would mean calamity for many growers. It was possible that the company might be forced to warn growers to curtail production and to prune heavily to lessen their crops. Stocks had increased by £296,000, yet prices had been maintained at pre-war prices, some even being decreased since the war. The company had subscribed a further £79,000 during the year, bringing their total to £137,563.



THE MARKET GROWER

SUMMER LETTUCE.

While Lettuce thrives best in early Spring and Autumn, good Summer Lettuce can be produced on heavy soils where the temperatures of air and soil is moderately cool, advises the "Queensland Agricultural Journal."

Lettuce cannot stand a check in the warm weather, therefore an even supply of moisture and plant food must be provided.

The preparation of the soil should include the digging in of a generous supply of farmyard manure. Besides supplying the necessary readily available food, this manure greatly assists in the retention of moisture and in keeping the soil cool.

As frequent watering will be necessary, any extra time required for levelling the land will be well spent. If the land is dry when the beds are formed, it will be advisable to thoroughly soak them before sowing the seed, as it will be found that the beds are inclined to settle unevenly after the first watering.

The seed being very small should be sown as shallow as possible and covered with just sufficient soil to ensure germination. A top dressing of fine manure after sowing will greatly assist in the germination, seedling, and maturing stages. Very thick seeding, besides being wasteful, entails much additional work in thinning. Successive sowings should be made at intervals of ten days throughout the Summer. The seedlings should be thinned before crowding takes place. Thinning is best done with a light hoe, blocking out the plants to approximately 12 inches apart in the row; further thinning by hand to one plant in any place may be necessary. To enable the plant to develop deep roots, over-watering at this stage should be avoided. More frequent waterings will be required as the plants increase in size.

Lettuce is a shallow rooter and a poor forager, and, therefore, well regulated waterings will do much to assist the growth of a strong deep-rooting plant. Over-watering is very damaging, and it will take some experience to tell just when the Lettuce needs water. Generally, a tough appearance and a darkening of the leaf are symptoms pointing to a lack of water. It is very important to select a variety for planting which grows well in the locality under consideration. Climatic conditions and market requirements also should be considered. In this respect both "Imperial F" and "Iceberg" are recommended.

NEW TOMATO VARIETIES.

Several new varieties of Tomatoes were discovered by Mr. J. Douglass, of the N.S.W. Dept. of Agriculture during his recent trip abroad. These are now being tried out in Australia in tests under local conditions.

Included are Grosse Hisse, a North African Marglobe type for outdoors and Potentate from England for hothouse work. The latter is virus-free and a heavy yielder of high-quality fruit. Another variety was Vetemold from Canada, where it is quoted for its resistance to leaf mildew, a problem in hothouse cultivation. It has a large fruit and would be suitable for Australia, Mr. Douglass believes.

Rouge de Marmande was another type from France, but early tests under unheated glasshouse conditions were not outstandingly successful, and further tests will be made. Canning varieties secured in Italy included San Marzana, which gives excellent results and is claimed by Italian growers to be resistant to fusarium wilt. The N.S.W. tests have not been satisfactory and will be tested further.

THE POTATO MOTH.

Brief Control Measures.

The measures recommended by the "N.S.W. Agricultural Notes" for the control of the Potato Moth are briefly enumerated as:-

(1) Plant deeply, cultivate properly, and do not allow the tubers to become exposed.

(2) Plant seed free from moth infestation.

(3) After filling the bags do not cover the mouths with Potato tops or other debris.

(4) Remove the Potatoes from the field as soon as possible after harvesting.

(5) If the Potatoes are to be kept for seed or held before marketing, store in moth-proof rooms, bins, or tanks to prevent the access of moths.

(6) If the Potatoes have to be stored in a shed which is not mothproof they should be covered as securely as possible with some suitable closely-woven material and examined at intervals for moth infestation.

(7) Should the tubers become infested they should be fumigated, preferably in a gas-tight bin, tank or room, with carbon bisulphide.

(8) If a gas-tight receptacle is not available, the Potatoes may be fumigated under canvas or "duck" sheeting, the edges of which must be securely fastened down.

5,000 ACRE POTATO FARM.

A Los Angeles farmer plants 1,000 acres with Potatoes last season, and is preparing for 5,000 acres in 1941. It is part of a 44,000 acre farm bought recently for £100,000. The farm was established by a Serbian family who got it as a grant from the original Spanish owners a hundred years ago.

SPOTTED WILT OF TOMATOES.

As most growers know, the Tomato Spotted or Bronze Wilt virus affects many other plants as well as Tomatoes. A book on plant virus diseases published in 1937 lists 103 species of plants belonging to nineteen different botanical families which have either been found naturally infected or which have been artificially inoculated with the virus. In this list the largest group of susceptible plants occurs in the family Solanaceae, to which the Potato and Tomato belong.

As further investigations are carried out the number of known plant species susceptible to Spotted Wilt continues to increase. For example, in September, 1940, Milk Thistle (*Sonchus oleraceus*) was recorded, for the first time in New South Wales, as a host of the Spotted Wilt virus, although it is suspected that it has long been an important source of infection. Plants on which the disease is of direct economic importance include Tomato, Tobacco, Pepper, Egg Plant, Lettuce, Potato, Pea, Iceland Poppy, Dahlia, and Zinnia.

Some of the other susceptible crop plants are attacked only lightly under natural conditions. On the other hand, there are many weeds on which the disease is of importance, because they serve as centres of infection for crop plants such as Tomatoes and Lettuce. These facts demonstrate the importance of clean cultivation and the destruction of all weeds, as well as the prompt removal of all infected plants in the crop. Attention should be given also to weed control in the headlands and clumps of infected Arum Lily and Nasturtiums should be handled ruthlessly.

It should be emphasised that for spotted wilt there is no known spray or specific which will cure infected plants, although diseased plants often survive and may even make a slight apparent recovery. — (N.S.W. Agric. Notes.)

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CANNING AND JAM FRUITS

CANNING INDUSTRY.

All Fruit to be Processed.

Agreement Reached.

The Assistant Minister for Commerce (Mr. H. L. Anthony) announced that arrangements have been made to enable the entire crop of canning fruit this season to be processed.

All Peaches, Apricots, and Pears suitable for canning will be accepted by the canners in the various States. Growers thus will be able to dispose of their fruit through normal channels. The serious position which threatened to face the growers and, to a lesser extent, the canners in relation to the 1940-41 crop has been averted by this arrangement.

The agreement provides that the canning industry will undertake the marketing of the pack to all available markets, including the domestic market, and will also be responsible for all export orders to the United Kingdom up to September 30, 1941. In the event that no exports can be made to the United Kingdom by reason of the absence of shipping space or other causes, the financial responsibility for the normal exportable surplus to the United Kingdom will be undertaken by the Commonwealth Government and the growers in agreed proportions.

The limit to the Commonwealth Government's financial responsibility will be approximately £800,000, but it is anticipated that only under very adverse circumstances would this limit be reached.

VICTORIA

GOULBURN VALLEY NEWS AND NOTES

APRICOT CANNING — SUCCESSFUL YEAR FOR CANNERIES — NEW SEASON'S PRICES.

(By Our Correspondent.)

FAVORABLE WEATHER conditions have been largely responsible for the early maturing of the Apricot crop, which commenced with the picking of the earlier varieties about November 21, and then followed by the Oullens varieties later by the main crop of canning varieties.

The fruit has been particularly clean and of good medium size with a larger percentage of canning quality than in previous years.

The weather was perfect for the picking of the main crop and nearly all growers had the bulk of their fruit harvested by Christmas Eve.

All three Goulburn canneries made an early start and have been in full swing for the past fortnight, both in canning and pulping.

W.B.C. Peaches and canning Peaches are looking particularly well and carrying a good crop of clean fruit.

The Pears have just received their fourth spray with arsenate of lead and up to the present there is very little codling moth in evidence.

All three Goulburn Valley canneries have had a successful year, showing good credit balances in spite of adverse trading conditions overseas.

Canned Fruit Prices Announced.

Prices that growers will receive for fruit for canning in the 1941 season have been announced.

The price that canners will pay growers for Apricots is £13 a ton (the same as last year), while Peaches and Pears are £1 per ton less than last year's prices.

They are as follows: — Peaches, clear centres, £11 per ton; red centres, £10 per ton; Pears, W.B.C., £11. Owing to abnormal conditions prevailing in the international situation, the prices must be considered satisfactory, although at the same time no allowance is made for the extra cost of production, in manures, spraying materials, wages, petrol and oils, cases, etc.

It is understood that in the terms of the Government's proposals all fruit suitable for canning will be accepted by canners.

COMPANIES' ANNUAL REPORTS.

Confidence Expressed.

In the following annual reports, the companies express confidence in the canning industry in spite of war conditions that affect all interests.

Shepparton: In the year ended October 31, a profit of £32,142 was reported after allowing for depreciation and taxes. This was £3,500 better than the previous year. The turnover for the year was well maintained. Assets represent a

(Continued on next page.)



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sum of £441,958, and reflect a strong financial position.

Ardmona: For the year ended October 21, this company processed 7,012 tons of fruit, against 6,787 in the previous year, and produced 9,650,000 tons of fruit (95,000 in 1939) as

well as 453 tons pulp. Pears created a record, but Peach tonnage was down. Profit was shown at £9,466 as against £12,058 in 1939 after depreciation and taxation had been allowed for. U.K. import restriction reduced the turnover considerably and resulted in ex-

ports being down about 900,000 cases. Substantial local contracts were being filled at date of report.

Rosella: The annual report of the Rosella Preserving and Manufacturing Co. Ltd. states that the year ending September

30 last created a record for sales, and that gross earnings were £238,528 with a net profit of £55,095 for the year. The company wisely provided for adequate supplies of tin plate for 1941. Assets are recorded at £683,721, and creditors nil.

KYABRAM EARNS MORE.

9,000,000 Cans Processed.

The annual directors' report of the Kyabram Co-op. Fruit Preserving Company for 1940, states that 6,219 tons of fruit was processed to produce 9,100,000 cans of fruit and 610 tons of fruit pulp. Alterations and extensions have been found necessary at the cannery and these will be completed ready for the coming season.

A profit of £15,728 was reported after providing £10,500 for taxation. Accumulated deficit has been reduced to £15,524. The increased profit is accounted for by the change to more F.O.B. accounts with the British Government in place of the previous C.I.F. terms.

FACTORY PRICES.

The minimum prices to be paid for fruit to be processed in 1941 for factories to qualify for the sugar rebate from the Sugar Concession Committee are as follow:—Apricots, £13 per ton; Cling Peaches, clear centres, £11; other Clings, £10; and Bartlett Pears, £11. In small fruits the prices are: Plums and Quinces, £8; Strawberries, 5½d. per lb.; Black Currants, 4d.; Gooseberries, 2d.; Kentish Cherries, 2½d.; Loganberries, 3d.; Raspberries, 3½d.; Red Currants, 2½d.; non-canning fruits (jams, etc.); Plums, £8 ton; Quinces, £7; Strawberries, 5½d.; Black Currants, 4d.; Gooseberries, 1½d.; Kentish Cherries, 2½d.; Loganberries, 2½d.; Raspberries, 3d., and Red Currants, 2½d.

DISPOSAL OF CANNED FRUIT.

Growers and Cannery Protected.

The recent report from London that imports of canned fruit from Australia were to be further restricted owing to a shortage of shipping space caused concern until a report from Canberra on December 13 stated that the Federal Government would share the financial responsibility for the exportable surplus.

It is understood that the surplus will now be stored and shipped when space is available. This fortunately means that growers and cannery will be protected for the 1940-41 season, and the fruit will be processed as usual. Canneries will undertake distribution to all available markets, including domestic, and will also be responsible for all exports to U.K. up to September 30, 1941.



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VICTORIA DOCK COOL STORES.

Extensions Planned.

The rebuilding of the burnt portion of the Government Cool Stores at the Victoria Dock, Melbourne, has been decided upon by the Victorian Government, and tenders for the work will be called early this year.

The necessity has been recognised for greater provision for the storage of perishable produce, one factor being the loss of ships with refrigerated space.

The Director of Agriculture (Mr. H. A. Mullett) estimates that for an expenditure of £40,000 it will be possible to provide for an additional 150,000 cubic feet without the installation of more plant.

DONATIONS FOR WAR SERVICE.

R.S.L. Returns Thanks.

The service of the many voluntary organisations in the matter of comforts for the troops is appreciated by all. Not less so is the appreciation of the many donations received from our readers in fruit-growing districts. The Returned Soldiers' League of Victoria asks us to acknowledge donations received from fruit-growing areas. The R.S.L. is affiliated with the Australian Comforts Fund, together with other voluntary organisations and all donations received are wisely used for comforts, sports supplies and other approved avenues of service to the fighting forces at home and abroad.

Groups noticed in the last official report of the R.S.L. War Service Fund include: Cobram £200, Warragul £100 and £100, Portland £50, Kerang £32, Tatura £30 and £10, Nathalia £25, Castlemaine £20, Myrtleford £20, Cohuna-Leitchville £18, Hastings £10, Cheltenham £10 and £5, Orbost £100, Cockatoo £20, Burwood £30, Blackburn £1.

Since last report many other individual and group donations have been made, so that the above does not represent all amounts received from fruit districts, which will be acknowledged from time to time. The fruit industry is giving valuable assistance both in men and money, and is definitely behind the war effort in Australia.

PACKING TOMATOES FOR THE LOCAL MARKET.

(By W. H. Harris, Asst. Fruit Packing Instructor, Vic. Dept of Agriculture.)

PROFIT IS NOT GAINED solely by producing a good crop, but also by presenting the product on the market in an attractive manner.

Incorrect harvesting is one of the most serious faults of Tomato growers. Immature fruit has no marketable value therefore Tomatoes should not be harvested in a green condition, but should show a little color at the flower end.

When packing Tomatoes it is desirable that careful attention be given to color grading, the fruit being graded "Ripe" or "Semi-ripe." Green fruit should not be mixed with the semi-ripe as this usually results in the whole case remaining unsold through the green fruit becoming wilted and spoiling the appearance of the case.

The diagonal system of packing is recommended, and for an attractive pack it is desirable that the Tomatoes should be reasonably uniform in size. The four sizes necessary to achieve this object are 2 inches and under, 2 to 2½ inches, 2½ to 3 inches and 3 inches and over.

All rough and misshapen fruit should be packed in separate cases.

Cases should be lined with white lining paper and on one end should be neatly stencilled the grower's name, or registered brand, and the size and grade of the Tomatoes.

WHITE BUTTERFLY MENACE.

Tasmania Prohibits Entry of Cabbages, Cauliflowers, and Lettuces Unless Certified Clean.

The Superintendent of Horticulture, Mr. J. M. Ward, has been advised by the Tasmanian Department of Agriculture that, in future, all Cabbages, Cauliflowers, and other plants belonging to the order Cruciferae, and Lettuces imported into Tasmania from another State must be accompanied by a certificate signed by an officer of the Department of Agriculture of the State from which such plants are exported certifying that to the best of the officer's knowledge such plants, at the time of export, were free from the caterpillars of the Cabbage White Butterfly.

TWO NEW ALMONDS.

Two new varieties of Almond have been notified. They are Jordanolo and Harpareil, and it is expected that they will replace some of the older and less satisfactory varieties. They have been well tested in California and are now being released for propagation.

Jordanolo has many good features. It grows vigorously, has dense thrifty foliage, a heavy cropper, is resistant to red spider, has a soft shell and kernels are of a desirable shape with few or no doubles, and they blanch

well. It is an early blooming variety.

Harpareil is also vigorous and has dense foliage, is a heavy cropper but not as regular in bearing as the Jordanolo. The kernel resembles Ne Plus Ultra, but is considered superior to it. It is quoted as not being as good a variety as the Jordanolo.

New Registration

Chilean Nitrate Agricultural Service, 44 Margaret-street, Sydney, advice on agriculture, etc. Com. 25/7/35. Proprs.: Robert D. and John R. D. Smith. Reg. 30/10/40.

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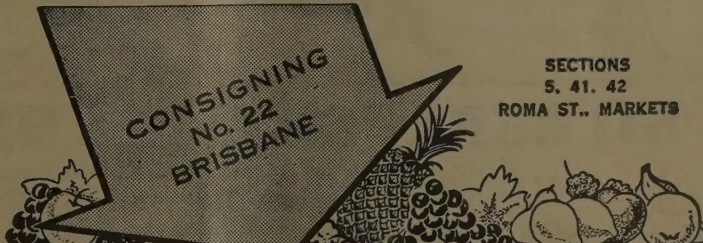
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Bathurst Packing House Co-op. Soc. Ltd.



MARKET NOTES AND PRICES

NEW SOUTH WALES.

The following information on trading in the City Municipal Markets was issued by the N.S.W. State Marketing Bureau for the week ending December 18:—

Trading in stone fruits continued to be satisfactory. Supplies of Peaches were not heavy, and good clearances of the lots forwarded were effected at satisfactory prices. Choice packs realised to 10/-, with some specials to 12/- half case. A

small consignment of Vic. Peaches sold to 16/- bush.

The bulk of the Apricots was available from the Murrumbidgee Irrigation Area and, apart from lots showing breakdown, sales were good at up to 7/- half case. Some fruit from the Goulburn district also was obtainable.

The quality of the Cherries arriving on the market was satisfactory and sales generally were made at 5/- to 6/- per quarter case.

Sales of Plums, except choice lots of large size, were quiet.

There was a scarcity of dessert Apples and quality lines of Democrats and Sturmers sold quickly. Increasing quantities of Apples of many varieties are arriving from coastal districts, but demand, except for selected sizes, was slow.

Valencia Oranges were in request early in the period, but demand eased later and values weakened. Choice packs realised to 10/- bush., with a few special lots dearer.

There was an improvement in request for Lemons, and rates for choice lines advanced.

On December 16 consignments of Pineapples approximated 5,000 cases; the bulk of supplies coming from Northern Queensland. Prices of Northern fruit ranged from 9/- to 12/-, while consignments from Southern areas were available at from 6/- to 9/- tropical case.

With the arrival of better quality Papaws the price range advanced and up to 14/- case was obtained.

Common Mangoes were plentiful, but were slow of sale. There was a good inquiry for Apple Mangoes and as much as 24/- bushel was obtained.

Supplies of Bananas were heavy; clearances were only fair and, prior to closing, values eased.

Ruling prices are:—

Apples: Sturmer (Tas.), 2/- to 8/-; Demo., 4/- to 14/- case.

Peaches: 3/- to 10/- (few higher). **Apricots:** 3/- to 7/- (special higher). **Plums:** 2/- to 6/-; special large to 8/-.

Passionfruit: North Coast, 6/- to 12/-; Q'land., 5/- to 10/- half case.

Bananas: Nines and eights, 14/- to 18/- (specials higher); sevens, 10/- to 15/-; sixes, 8/- to 10/-; ripe and inferior cheaper. **Papaws:** 6/- to 12/-; specials, 14/- . **Pineapples:** Nth. Q'land., 9/- to 12/-; Sth. Q'land., 6/- to 9/- tropical case.

Oranges: Val., coastal, 4/- to 10/-; Irrig. Area, 4/- to 10/-; specials dearer. **Lemons:** Coastal, 4/- to 14/- . **Grapefruit:** Inland, 8/- to 14/- . **Apple Mangoes:** 20/- to 22/- case.

Rock Melons: Q'land., 12/- to 16/- crate.

Cherries: 5/- to 6/- (specials higher) quarter case.

SOUTH AUSTRALIA.

Adelaide: The following prices are supplied by the S.A. Fruit-growers' and Market Gardeners' Association Incorp.:—

Fruits: Oranges, Common 6/-, Val. 8/-, 9/-, Navel 10/-; Lemons, 10/-, 12/- case; Apricots, 4/- ½ case; Peaches, white flesh, 6/- ½ case; Nectarines, 7/- ½ case; Plums, Japanese, 5/- ½ case; Cherries, Blacks, 8/-, 9/- ½ case; Raspberries, 6/- doz. lbs.; Bananas, 20/-, 22/- crate; Pineapples, 17/-, 18/- crate.

Vegetables: Beans, French, 8/- doz. lbs.; Beetroot, 2/- doz.; Cabbages, 2/- to 5/- doz.; Carrots, 3/- doz. bchs.; Cucumbers, 15/- case; Cucumber, Apple, 3/- case; Lettuces, 1/6, 2/- doz.; Onions, 14/-, 15/- cwt.; Parsnips, 2/- doz. bchs.; Peas, 9/-, 10/- bushel; Potatoes, 10/- cwt.; Rhubarb, Cherry, 1/- doz. lbs.; Tomatoes, firsts 8/- ½ case, second 7/- ½ case; Trombones, 28/- cwt.; Turks Head, 28/- cwt.; Turnips, 2/- doz. bchs.; Swede, 2/6 doz. bchs.; Vegetable Marrow, 6/-, 8/- dozen. (Cases extra.)

Monday's Xmas market resulted in a ready demand for all lines, and a good clearance was effected. Prices mainly were unaltered, but Beans and Peas were both advanced in price. Stone fruits were strongly sought, particularly was this the case with Peaches.

EXPORT APPLE SIZES.

At a largely attended meeting of the Gippsland (Vic.) Fruit Marketing Association, growers decided to ask for minor alterations to the list of Apple varieties and sizes for export in 1941.

It was decided to ask that 2½-inch Jonathans be included with 2½-inch at the higher price; also that Pomme de Neige and Stewarts be lifted to Group 1.

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Poultry Notes

GET RID OF FLIES.

Treating Fowl Manure.

The common fly is a greater menace to the health of the flock than most people recognise. Flies have the unhappy facility of spreading disease and they travel such great distances that they are often the medium for carrying disease. To an extent we recognise this common problem in the home but so often neglect it on the farm.

In discussing the disposal of poultry manure and its treatment to offset the fly menace, a writer in "Pacific Rural Press" suggests the use of powdered hellebore, an inexpensive chemical. His advice as to its use is to dissolve $\frac{1}{2}$ lb. of the powder in 10 gals. water, stirring it in thoroughly and allowing it to stand for 24 hours before using. Sprinkled over the manure heap it makes a good deterrent to flies and cannot harm the fowls even though they scratch over the manure.

Another larvicide is powdered borax. It is non-poisonous, non-inflammable and also inexpensive. He suggests using $\frac{3}{4}$ lb. to 10 gals. water, mixed well and sprinkled over the manure.

CULL ALL UNTHRIFTY PULLETS.

They Seldom Pay to Keep.

Even the most promising pullet may become a loss to the poultry farmer if kept on in the hope of paying back something for its non-productive period. This emphasises the advantage of periodically handling pullets, so that the obviously bad-doers can be sold, for a pullet can never turn out a good layer unless it thrives well during its early career and has a sound constitution.

It always goes against the grain to part with a half-grown pullet, but those described will unquestionably require a large amount of food before they start to lay, and during every season that they are kept will produce less than the naturally good-doers.

SOILED EGGS.

Lower the Returns.

Recently the Victorian Egg Board found it necessary to report that producers were literally losing money by sending soiled eggs to the market, where they were graded and paid for at the lowest rate operating. This strict grading, and the fact that some producers do not clean the eggs before sending them to market, is the cause of many eggs being rejected as below the export standard. Yet, without too much trouble, the producer could clean the eggs, save rejects and get better price returns.

Nests should be kept clean and nesting material changed at least once a month.

The Pig Pen

PIGS DO NOT NEED MILK.

MILK IS NOT ESSENTIAL for the rearing of pigs, stated Mr. A. F. Gray, senior Piggery Instructor, N.S.W., in a talk recently given to farmers. Many dairy farmers, he stated, do not grow pigs because they believe that milk is necessary and they cannot afford to provide it for pigs when they require all their production for market.

Owing to the present demand for pig products, which is likely to continue, he believes that farmers would be wise to consider extending their efforts to pig raising. Pigs respond to good pasture which contains proteins, minerals and vitamins in abundance, with good pasture the cost of feeding need not be great. All forage crops: green barley, rape, oats, maize, pumpkin, mangels, etc., are not rich in protein and these foods must be supplemented otherwise.

COST OF FEEDING PIGS.

During an experiment conducted by the S.A. Department of Agriculture the actual cost of food was noted. The food used was crushed barley, crushed wheat, pollard, meat meal, meat refuse, skim milk, buttermilk and greenfeed. 88 pigs averaged for 3 months a cost of £1/5/8 for food, or 3.48 pence per day, or 2.53 pence for each lb. of increased live weight. Those fed barley, meat meal and greenfeed cost slightly less than the other test groups.

The tests showed that 7 bush. crushed barley, 35 lb. meat meal with greenfeed produced baconers to 173 lb. live weight but $2\frac{1}{2}$ bush. of barley extra was required to reach heavy baconers to 200 lb.

Home Notes

CHERRY RECIPES.

While Cherries are still available, many dainty dishes can be made from this popular fruit, apart from the use of the fresh fruit as a dessert. Having a short season, the Cherry can be used in many ways and add greatly to the seasonable menu.

American Cherry Pie.

Mix $1\frac{1}{2}$ cup sugar, 2 tablespoons cornstarch, $\frac{1}{4}$ teaspoon salt; add 1 lb. fresh stoned Cherries. Line a deep pie dish with pastry, fill with fruit mixture, and dot with pats of butter before covering with pastry. Press edges firmly together so juice will not leak out while baking, and prick top of pastry. Bake in hot oven for 15 minutes, then reduce heat and bake for a further 20 minutes.

Spiced Cherry Meringue.

Wash and stone 2 lb. Cherries and mix with enough water to cover; 1 dessertspoon lemon juice, $\frac{1}{2}$ cup well washed sago, $1\frac{1}{2}$ tablespoon melted butter, 1 cup brown sugar, pinch salt, $\frac{1}{2}$ teaspoon ground cinnamon or nutmeg. Bake mixture in a covered oven-proof dish until Cherries are cooked when tested. Beat whites three eggs to a meringue with 4 oz. sugar added gradually, 1 teaspoon cornflour and 1 teaspoon lemon juice, and spread over Cherry mixture; sprinkle with cinnamon or nutmeg. Bake in a slow oven until meringue is set.

Cherry Shortcake.

Make shortcake by sifting 2 level cups plain flour, 3 level teaspoons baking powder, good pinch salt, 2 level tablespoons sugar together. Add 5 level tablespoons butter or good margarine, mixing well, and form

into soft dough with $\frac{1}{2}$ cup milk and 1 well-beaten egg. Divide into two equal parts; press one part into well buttered sandwich tin, spread with a little butter, and place remaining half on top. Bake in a fairly hot oven for about 25 minutes. While baking prepare a mixture with 1 lb. stoned Cherries, stewed in little water, with sugar to taste, and a piece of stick cinnamon. Drain and boil syrup until it will spin a thread when tested. Add Cherries, and allow to cool before placing between cake, which should be split through the centre. Spread whipped cream thickly on top, and decorate with Cherries before serving.

Cherry Delight.

Soak 1 tablespoon granulated gelatine in $\frac{1}{2}$ cup cold water, and dissolve in $\frac{1}{2}$ cup boiling water. Add $1\frac{1}{2}$ cup dark Cherries stoned and stewed; then cut in halves, and add $\frac{1}{2}$ cup Cherry juice. When mixture begins to thicken beat and add pinch salt and whites of 2 eggs beaten stiffly. Fold all together and turn into slightly greased mould and chill. Remove from mould when well set, and serve with whipped cream, garnished with chopped fresh Cherries and chopped nuts.

Cherry and Raspberry Jam.

Take 2 cups stoned Cherries, 2 cups Raspberries, 3 cups sugar, juice of one Lemon. Chop Cherries and mash fruit in preserving pan. Heat to boiling point, and add sugar. Boil rapidly to preserve color and flavor until jam begins to thicken, stirring frequently. Fifteen minutes of cooking should be sufficient in most cases. Pour jam into hot, clean jars, and seal at once. Long cooking darkens the jam and spoils the flavor.

SPECIAL NOTICE TO FRUITGROWERS

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under
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In response to numerous requests from growers for information as to who are members of the
Wholesale Fruit Merchants' Association of Victoria
the following list is given. All are members of the above Association, and are registered firms carrying on business in the

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Correspondence is invited by the Association.

Office : 21 Wholesale Fruit Market,
Queen Street, Melbourne. Phone: F 4866.

Motor Notes

Charcoal Gas Will Producer Units Pay?

In view of petrol rationing, Mr. G. Neighbour, of Carey's Gulley, S.A., gave the following answer to a question of whether it would pay a market gardener to fit a producer gas unit to his truck, at a meeting of growers reported in the S.A. Journal of Agriculture.

From this district a 2½ ton truck doing three trips to market each week, runs a total of 75 miles, using petrol at the rate of 10 miles per gallon. The producer gas unit, including fitting, can be purchased for £75.

Each week the truck running on petrol would cost about 16/- against 4/- for charcoal. 16lb.

of charcoal, obtainable for about 6d. is equal to 1 gall. of petrol at 2/4. Also there is the possibility of a petrol shortage if the international situation does not improve. There would be no shortage of charcoal, and if necessary, the gardener can burn his own charcoal.

One considerable drawback with the producer gas unit is a 20 per cent. loss of power. On level running this makes very little difference to performance, but in hill climbing it necessitates changing to a lower gear.

When most makes of producer gas units are fitted, a change-over button is also included,

which enables the driver to change from charcoal gas to petrol or from petrol to charcoal gas. In this case, if a hill is too steep to negotiate with charcoal gas, the driver can change over to petrol and then going down the other side he can change back to charcoal gas.

A boring contractor in South Australia owns a 30 cwt. truck fitted with a producer gas unit which travels a daily average of 100 miles, and its usual load is two tons on the truck and drawing five tons on a trailer. This truck and producer unit have travelled 25,000 miles and shown very little sign of wear.

Some engineers claim that an engine will last much longer when using charcoal gas, as it is a dry gas and will not dilute the oil in the crankcase.

A little more time is needed with a producer gas unit for cleaning out, which takes about

five minutes, but this is more than compensated for by the savings in fuel expenses.

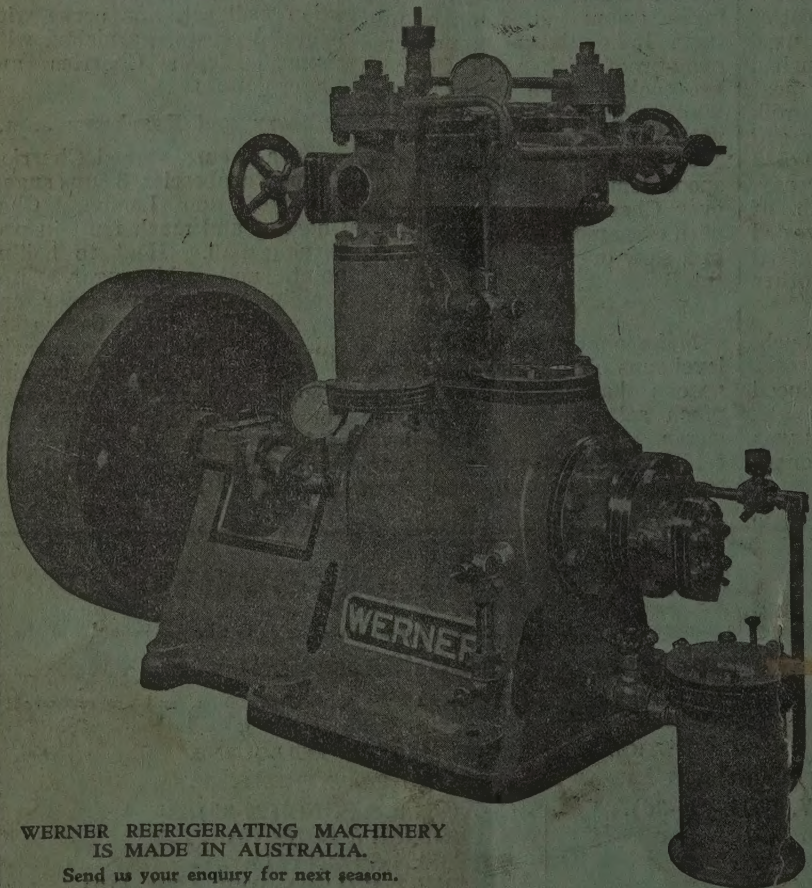
THE SPEEDOMETER.

On modern cars and trucks the speedometer is driven from the tail shaft and lubrication is automatic from the gear box, but the flexible shaft is not so oiled, and should be removed for greasing about every 10,000 miles or less.

Unless this is done it will eventually wear and break, and does not always give warning by noise before wear has become serious. Other causes of wear are a sharp bend in the casing, rusting, a broken outside casing causing wear or cutting of the inner cable, or a dent in the outer casing which may be caused by a knock, jamming, or a locating clip being screwed down too tightly. A fault in the speedometer head causing it to become locked will break the cable. When greasing a cable, the lubricant should be a type of lubricant such as supplied for ball bearings or universal joints. Apply it lightly along the whole length of the cable. Using too much, or simply packing it into the upper part of the cable, may allow it to work into the head and cause trouble. The sharpest bend around which a cable may be run should never be sharper than an arc of a 12-in. radius circle.

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West. Aust.: Atkins (W.A.) Ltd., 894 Hay St., Perth.

South Aust.: W. J. White, 56 Franklin St., Adelaide.

Tasmania: Noyes Bros., Hobart and Launceston.

N.S.W.: R. J. Lindsay, 99 Kippax Street, Sydney.

Stuart Walker, 174 Clarence Street, Sydney.

Q'land: Garoche P. Ltd., Wooloongabba, Brisbane.

FAN BELTS IN SUMMER.

Warm Weather Care.

During the hot months a severe strain is put upon fan belts and radiator hoses and these should be inspected frequently. Even with large radiators, unless the fan operates properly there may not be enough air circulating.

Modern conveniences, such as radios, heaters, lighters, dual horns, etc., impose a severe strain on the battery and generator. As the generator is usually driven by the fan belt, the fan's task becomes even greater.

The water pump is also driven by the fan belt. Average driving speeds 10 years ago were between 30 and 35 miles an hour, but to-day they are from 40 to 50 miles an hour. At these speeds more reliance must be placed on the water pump to keep the engine cool. Motorists who travel long distances are advised to carry a spare fan belt. The outlay is small compared with the inconvenience and damage likely to be caused by a belt breakage.

While the radiator hose is straightforward and simple, it is no less important. For this reason the hose should be inspected at regular intervals and renewed at the first sign of cracks or breaks. Sometimes excessive heat causes the inner rubber to swell and restrict the passage of water.